CHICAGO

PUBLISHED BY

The Inter Ocean.

UNIVERSITY OF
ILLINOIS LIBRARY
AT URBANA-CHAMPAIGN
BOOKSTACKS

WITHDRAWN
University of
Illinois Library
at Urbana-Champaign

Digitized by the Internet Archive
in 2023 with funding from
Kahle/Austin Foundation

https://archive.org/details/centenialhistory0000vari

LIBRARY
UNIVERSITY OF ILLINOIS
URBANA

THE INTER OCEAN BUILDING.

CENTENNIAL HISTORY

OF THE

CITY OF CHICAGO

ITS MEN AND INSTITUTIONS

Biographical Sketches of Leading Citizens

ILLUSTRATED

1905
PUBLISHED BY THE INTER OCEAN
CHICAGO

PRESS OF THE BLAKELY PRINTING COMPANY
CHICAGO

Prefatory.

DURING the five years since the first edition of the Inter Ocean's history of Chicago was presented to the public, the city has rounded out its first century. In presenting this volume the general plan of the original work has been followed. The progress made by the city in its various lines of activity has been carefully recorded.

The claim is not made that it is a complete, comprehensive history of Chicago's first 100 years, but the publishers believe it contains more important facts concerning the growth of the city during the first century of its existence than any other like publication.

The superior arrangement of facts and events mapped out by the Hon. Frank Gilbert, in the original edition, has been adhered to as closely as changing conditions warranted. Much of the matter is preserved intact. Except where it has been necessary in bringing the work up to date, no material changes have been made. Mr. Gilbert's plans can be best outlined by quoting from the preface of the first edition:

"It was his thought that facts and events would thus be placed before the reader more attractively and the book be better adapted for the purpose of reference. It is hoped that this method of treatment will find favor with readers. The great public undertakings which are closely connected with the life and growth of the city are especially exploited and the private and personal enterprises which have been great aids in the building of the city are given the attention they so justly deserve. The men, too, whose ability, genius and forethought have added to the city's character, wealth and renown have been remembered, and not the least interesting, historically considered, are the biographies of these city-makers. This is not a pretentious or great work, but it is hoped that it will be found useful and be given a place in many libraries."

CHICAGO, 1905.

1176646

VIEWS—WEST CHICAGO PARKS.

CHAPTER I.

CHICAGO'S FIRST CENTURY.

HE history of Chicago's first century is a record of stupendous contrasts.

One hundred years ago a frontier fort with one white settler under the protection of its sheltering stockade

To-day a community of over two million souls.

A century ago unmarked on the country's map.

To-day the second city in the United States and the fourth in wealth and commercial power in the world.

In 1803 one Indian trader.

In 1905 a commanding metropolis with a commerce more valuable than was known to Alexandria, Venice, Carthage and Tyre.

Outstripping all competitors, the center of the most fertile region on earth, the great Middle West, from which the wealth of the nation is mainly drawn, Chicago at the beginning of its second century looks forward to a maturity that can be measured only by its unparalleled past.

Its massive buildings, its countless homes, its thousands of factories, its hundreds of churches, its palaces of art and industry, its great railroad systems, its magnificent parks, its splendid financial institutions, with their hundreds of millions of deposits, its boundless charities, its great thoroughfares and boulevards, its billions of commerce on land and lake, its schools with their army of 300,000 children, its colleges and great universities—all these attest the work of Chicago's first one hundred years.

While Chicago has not the traditions of the older cities of the continent, nor the poetry and romance of the historic centers of the Old World, it has taken its place among the great cities of the Globe with a rush that has set aside all records and set a new mark in the growth and development of municipalities.

It was needed and it came.

Chicago's entire history is record breaking. Its accomplishments, failures, disasters, experiences have all been of the superlative degree. It has always done things on a big, broad gauge, wholesale scale. Its growth in population, its expansion in area, its park and boulevard system, its strikes and riots, its fires, its World's fair, its universities and public schools, its drainage system, its tall buildings, its Americanism despite its polyglot population, its murder mysteries, its commerce, have all be epochal. There have been no half way possibilities for Chicago. It always "goes the limit." It is the busiest, richest, poorest, most advanced, and most backward, windiest, most growing, swiftest moving, and most aggressive city in the world.

Chicago's commercial pre-eminence is due primarily to its geographical location. At the headwaters of Lake Michigan, which dips into the very heart of the great inter-mountain region of the nation, it is the natural gateway and centering point of most of its commerce. The great leaders in the early commercial activity of the city recognized this, as did the first white men who pierced the western wilderness.

It is borne out by the great highways of commerce, the railroads that center here. Over their rails are carried two-thirds of the entire tonnage of the United States. No city on the face of the earth can compare with Chicago as a railway center. Chicago railways have under their control or directly tributary to them 80,000 miles of tracks. They operate more trains in and out of Chicago daily than come into and leave any other city in the world.

Chicago's downtown business section, a little more than a mile square in extent, comprises the life center of

the most gigantic freight traffic in the world. In this small congested area, bounded by Twelfth street on the south, the river on the north, Canal street on the west and the lake on the east, are handled daily over 300,000 tons of freight. By teaming alone in the loop district 100,000 tons are carried. The tense activities of 800,000 people are carried on daily in this same territory. Along its thirty miles of streets and alleys these 800 regiments of men, women and children buy, sell and labor during twelve hours of the day. The inescapable commercial destiny of Chicago is manifest nowhere more clearly than in this square mile of territory in the downtown district. The magnitude of this glut of commerce and business activity precludes a boast. Chicago merchants pay no less than $50,000,000 a year for the cartage on the raw material and finished products transported through this district annually. The railroads take into this district and out of it more freight than they load and take from any similar area in the world, more than any other group of railroads give and take from any like district on earth.

Chicago is the pulse of the world's food market. On the floor of the Board of Trade is gauged the nation's business in produce. It is the counting room of the western granary of the nations. The total cereal receipts of the city range from 250,000,000 to over 350,000,000 bushels annually. The receipts of livestock aggregate 15,000,000 head, making this the greatest cattle market the world has ever known. Its stockyards cover 500 acres and 300 miles of railroad tracks gridiron it. Here are employed 50,000 people and the value of the livestock handled is $300,000,000. The products of the great packing houses are sent into every land.

The capital invested in Chicago's manufactories aggregates $625,000,000. An army of 300,000 workers is employed in these industries and the wages paid reach a total of nearly $165,000,000 annually. The output is valued at $1,000,000,000. For twenty years there has been no decrease to the titanic forward strides of the city's factories. Chicago's accessibility to cheap fuel and raw materials, its cheapness of land, its natural and inevitable advantages as a focal point for the transcontinental traffic of the country have all contributed to attract to the city capital and labor. While the greatest conflicts between these interests have been fought here, it has not deterred the steady influx of more money seeking investment and of more workers seeking employment. The very immensity of Chicago has furnished an element that has made for the freedom and interests of both sides. Here no aggregation of capital is great enough to hopelessly crush the workingman nor no labor organization so autocratic as to permanently cripple a great industry.

The second century of Chicago's existence opens up a magnificent vista of municipal development. No greater movement for the education and elevation of the people was ever planned. The schools of the city are adjusted to the needs of modern industrial life. Nor will Chicago be submerged in the intensified commercialism of the age. To teach the coming generations to work with their hands, guided by a trained intelligence, is the aim of the present educational movement of the city. Manual workers and trained housekeepers is the product of citizenship aimed at, both fitted for home builders and useful members of the community.

Co-ordinated with this central schools system are the parks, neighborhood houses, libraries, art galleries and other public institutions. Already have the park commissioners of the South Side built neighborhood club buildings in the congested districts. Fitted with gymnasiums, baths, swimming tanks, halls and reading rooms they have become the center of the citizen-building movement in the districts where before there was little to inspire the effort to rise above the dead level of depressing environment. The physical and intellectual stimulus can only make for the elevation of the civic life of the entire city.

Nor are the schoolhouses any longer only places for the children five or six hours a day. These are now used as the rallying points for the entire neighborhood. Here the parents of the children and the older members of the family can meet for lectures, concerts and the discussion of questions affecting the community.

Thus the workers in Chicago's industrial army are being fitted for their share in the upbuilding of the city, and influences started that will bear fruit during the city's second century.

CHAPTER II.

THE CENTENNIAL CELEBRATION.

EPTEMBER 26, 1903, Chicago began a week of celebration in commemoration of the arrival of John Kinzie, the first white settler, and the founding of Fort Dearborn. From all over the West the friends and admirers of the city came to join with the two million Chicagoans in the festivities. For a time the present was forgotten, and every mind went back to the stockaded fort and the solitary white settler in his log shack across the river. The descendants of this pioneer and the officers who led the small company of United States regulars into the western wilderness and built the government outpost, together with the Indians whose fathers were the owners of the land where a city of two million souls now stands, met in a common reunion.

Chicag, the grizzled chief of the Chippewas, older than the city itself, sat upon the platform with the little great-grand-granddaughters of Captain John Whistler and the descendants of Lieutenant Swearingen, and John Kinzie. Push-a-ta-nee-kah, chief of the Sac and Fox nation, delivered an address. These links with Chicago's past brought back the picture of the frontier post of a century before more vividly and emphasized the wonders that had been wrought from the wilderness more eloquently, than did the orators who told the story in rounded periods.

Tablets were placed at historic spots. These will, in time, be wrought in bronze in commemoration of the men and events to whom Chicago owes its beginning and existence. At the public library was placed a reproduction of the first Fort Dearborn built in 1803, and the stockade as rebuilt in 1816. Here the opening exercises of the celebration were held and Margaret Schuyler Joy and Catherine Whistler Joy, the great-great-grand daughters of Captain Whistler who built it, unveiled the memorial.

Tablet No. 2 was placed on the Palmer House. On it was a map of the city in 1871, showing the extent of the great disaster, encircled by two allegorical figures symbolic of smoke and fire. It told the story of that tragedy, "The Chicago Fire 1871, burned four miles along the lake and one mile inland; 2,214 acres of ground, 13,500 buildings destroyed, 92,000 people made homeless—$186,000,000 property lost."

The tablet placed on the Masonic Temple bore this inscription. "Fort Dearborn Military Reservation, 75 acres—established 1824—sold for town lots 1839. This square reserved for Dearborn Park, City Library erected 1898." At Madison and Wabash a tablet in honor of Marquette was placed. The likeness of La Salle was placed on the tablet erected on the Board of Trade. On the city hall were shown in relief the first and second courthouses erected on the site by Cook County. A reproduction of the first railway station and "The Pioneer," the city's first locomotive, was put up at the Chicago and Northwestern depot, Wells and Kinzie streets. Chicago's share in the selection of Abraham Lincoln was recalled in the tablet at Market and Lake streets. On it were these words, "Here stood the temporary Republican wigwam in which Abraham Lincoln was nominated for the Presidency, May 18, 1860.

The second day of the celebration being Sunday, the greatness of Chicago was the theme in all the pulpits. Special commemorative services were held and the destiny of the metropolis of the West vividly portrayed. On the Monday following, a general holiday was declared and hundreds of thousands thronged to Lincoln Park to see the great Indian encampment located there. The scenes of early Chicago were portrayed in the Indian games and pastimes, and in the storming of Fort Dearborn, a realistic reproduction of which had been

erected for the purpose. There was a notable gathering of old settlers in the evening at the rooms of the old Chicago Historical Society.

The Indian festivities were continued on the next day, and throughout the entire week, and in the afternoon a reunion of the Kinzie, Whistler and Swearingen families was held at the Auditorium Hotel. These three names are more closely associated with the founding of Chicago than are any others. The day closed with a great parade in the evening, showing the commercial growth of the city. It was a spectacle surpassing anything of the kind ever seen in Chicago. All the military organizations, police and fire departments, including the old-time firemens' brigade, the Indian tribes and representatives of all the nationalities in Chicago took part. The crowds that had been arriving the previous days packed the downtown districts to witness the parade. On Wednesday the festivities were continued at Lincoln Park, the Indian encampment and rowing and swimming races being the attractions. The Daughters of the American Revolution held a reception at Memorial Hall in the evening, which several thousand attended. A great fire-works display on the Lake Front closed the program for that day. Thursday was known as "Mayor's day," and a banquet to visiting officials was held at the Auditorium Hotel in the evening. The head executives of New York, St. Louis, Philadelphia, Cincinnati, New Orleans, Toledo, and many other cities, including most of the Illinois towns were present. A civic mass meeting at the Auditorium followed the dinner at which Mayor Low of New York was the speaker. The week's festivities closed with another extensive display of fire-works on the Lake Front Friday evening, the visitors having spent the day at Lincoln Park, and viewing the great manufacturing and commercial attractions of the city.

GARFIELD PARK PAGODA.

CHAPTER III.

EARLY CHICAGO.

A LITTLE ridge, only from eight to ten feet above lake level, just west of the present limits of Chicago, may be noted as nature's first entry in the history of this city. It served as the starting point of an aquatic revolution, or evolution. Gradually dry land was formed where hitherto the waters of our unsalted, mid-continent sea had held undisputed sway, making for itself an outlet to the Gulf of Mexico. Slowly the soil was prepared for one of the mightiest urban growths of the globe.

But the rescue of a little patch of earth from the domain of water was not of itself enough to ever serve as the germ of a city. It was the short and sluggish stream now called the Chicago River which was the decree of fate. It is no exaggeration to say that the metropolis of the Middle West rests on the river which bears its name. How long the ridge stood and the river flowed before the first step was taken in the fulfillment of this municipal destiny, science cannot determine. The beavers and the Indians made some joint use of the property—just enough to be a prophecy of what civilization would do when the time should come for their realization.

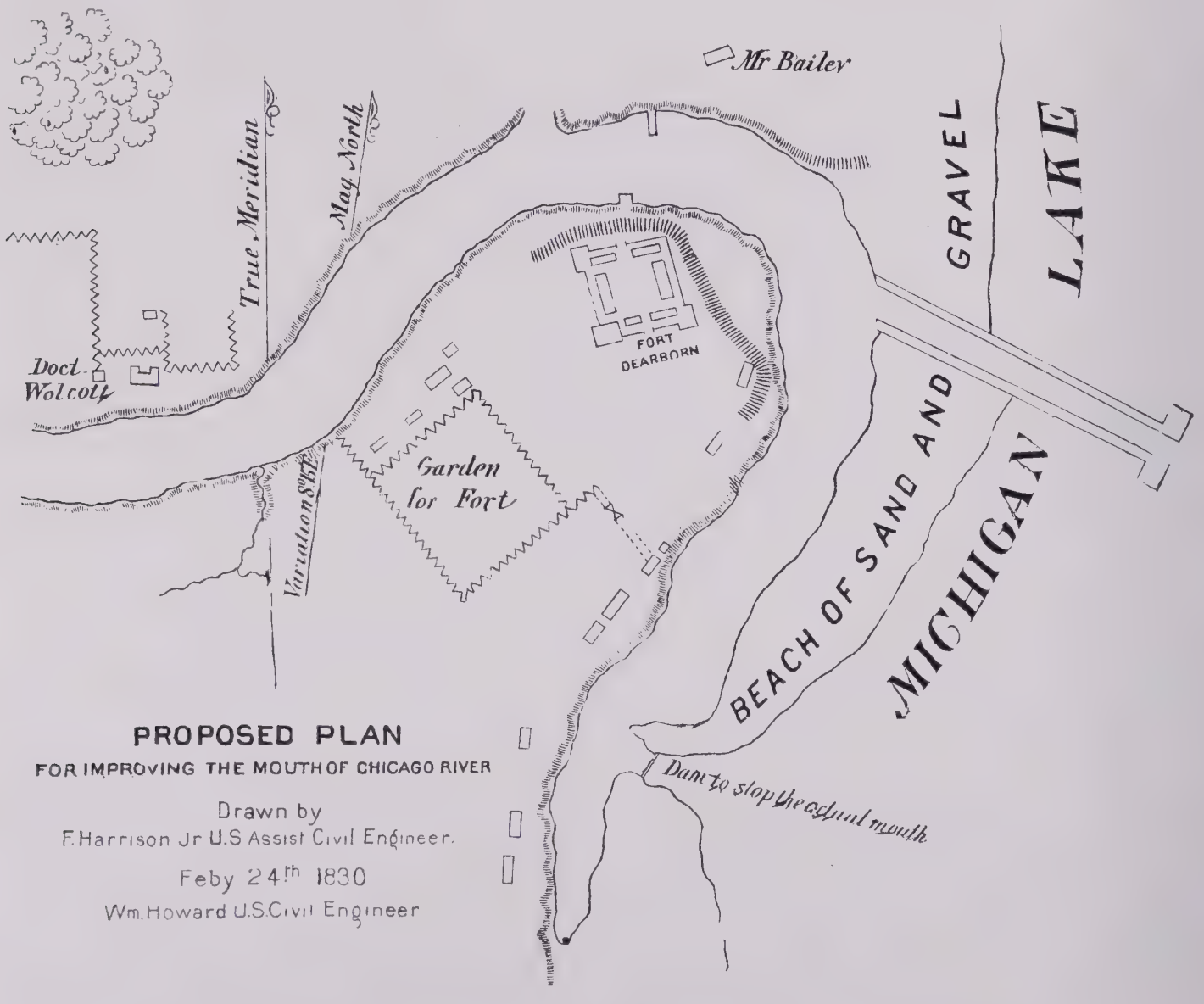
Chicago may be said to have been discovered by Sieur Joliet. It is one of the more notable evidences of man's ingratitude that not even a street in the city bears the name of this prescient discoverer. La Salle, who came eight years later, had a vague yet inspiring vision of the heart of the continent. He caught foregleams of what might be and has been developed from the St. Lawrence to the Gulf of Mexico, but the importance of this portage escaped his observation. Joliet reached it December 14, 1674, and when he returned to Montreal he reported this portage as the most important discovery of his entire trip, extending as far west as the Mississippi River.

The illustrious Frenchmen named, and their compeers, Father Marquette and Tonty, were mere warfaring observers. The first settler who was in any sense a connecting link with civilization was a negro from Hayti. How he came to drift so far from his original moorings is a mystery, but here he was found, living solitary and alone, by Colonel Arent Schuyler de Puyster, commandant at Mackinaw, in the summer of 1779. The record of this curious find bears the date of July 4, 1779. It is a noteworthy and suggestive fact that the military achievement which added the "Illinois country" to the United States, preventing this vast prairie region from sharing the political fate of Canada, also dates from Independence Day. The name of this first settler was Jeane Baptiste Point de Saible. He is supposed to have lived here twenty years, but, tired of waiting, apparently, for the coming of the white man, he removed to Peoria, where his death occurred. The commandant described him as "a handsome negro," and again as a Haytian mulatto, "well settled at Eschikagcu." The humble dwelling of this pioneer was at the corner of Pine and Kinzie streets, a spot hardly less deserving of commemoration than the site of Fort Dearborn.

A little before Saible is supposed to have settled here the first Chicago real estate transaction occurred. One William Murray, then living in Kaskaskia, conceived a grand land speculation worthy of George Law. He organized "the Illinois Land Company" in 1773, and in its behalf made a purchase from the Indians of a tract. The vast tract bought had for its northeast corner mete and bound, as described of record, "Chicagou, or Garlick, Creek." The enterprising Haytian was just over the line, on the north bank of "Garlick Creek." Mr. Murray and his company would hardly have been

heard of more but for the casual mention of "Chicagou."

The first white pioneer was John Kinzie, a name conspicuous in the early days of the city, and still familiar. In 1804 he bought the cabin of Saible. It is true that Major Whistler came here the year before and built the first Fort Dearborn, the log structure burnt at the massacre of 1812, but he cannot be said to have



THIS SKETCH OF SURVEY OF CHICAGO SENT TO CONGRESS WITH REPORT IN 1830.

been instrumental in promoting Chicago, as a mart of trade and center of population.

Moving on and shifting our viewpoint, it may be fairly said that Chicago was born at Greenville, Ohio, in the year 1795. It was at that point that General Wayne, the "mad Anthony" of military history, met the representatives of twelve Indian tribes, and, as the agent of the United States government, bought the original site of Chicago. One of the minor provisions of the treaty of Greenville was that the United States government should have several isolated pieces of ground for trading posts. In this list is found the following entry: "One piece of land six miles square at the mouth of Chicago River, emptying into Lake Michigan, where a fort formerly stood." That treaty fixed both the geography and the orthography of the city.

The first event to bring Chicago within the scope of general observation was the Fort Dearborn massacre, if even that did it. Massacres quite as revolting and soul-harrowing were not so very unusual in pioneer days as to attract universal attention, and news traveled slowly. It was not, however, so much a part of the price of progress in national expansion as an incident of the second war with England.

The United States declared war June 12, 1812, and on the 9th of August succeeding Captain Heald, com-

mander at Fort Dearborn, received orders from General Hull to evacuate the fort and take his women and children to Detroit by land. The departure was set for the fifteenth of the same month. Some of the women and children were sent by boat, notwithstanding the order. That they were not all quietly dispatched in the same way was one of the mistakes of Hull. The evacuation itself was due to indications that British emissaries from Canada had begun to tamper with the Indians. The party which started out to make that overland march consisted of 110 white men, ten women, twenty children and 100 Indians supposed to be friendly. This mixed company had proceeded only about a mile when a large body of Indian warriors fell upon them. The friendly Indians either joined in the attack or skulked; most of them were downright treacherous. In ten minutes every white man, woman and child was dead except fifteen. Many a heart-rending tale is still told of that massacre, slightly relieved by a rescue by one genuinely friendly red man. On that day of horror Chicago received its baptism of blood, as October 9, 1871, it received its baptism of fire. The slaughter occurred in the vicinity of Eighteenth street and Prairie avenue. A large elm tree was supposed to mark the spot as near as possible. The massacre tree survived until 1887, when it shed its last leaf, unable to respond again to the quickening call of spring. It was cut down and a fitting monument in bronze commemorative of the tragic event was erected in its place by Mr. George M. Pullman, who owned the ground. Many conflicting reports were made of the massacre, but the account here followed was set down, with many omitted details, by an eyewitness.

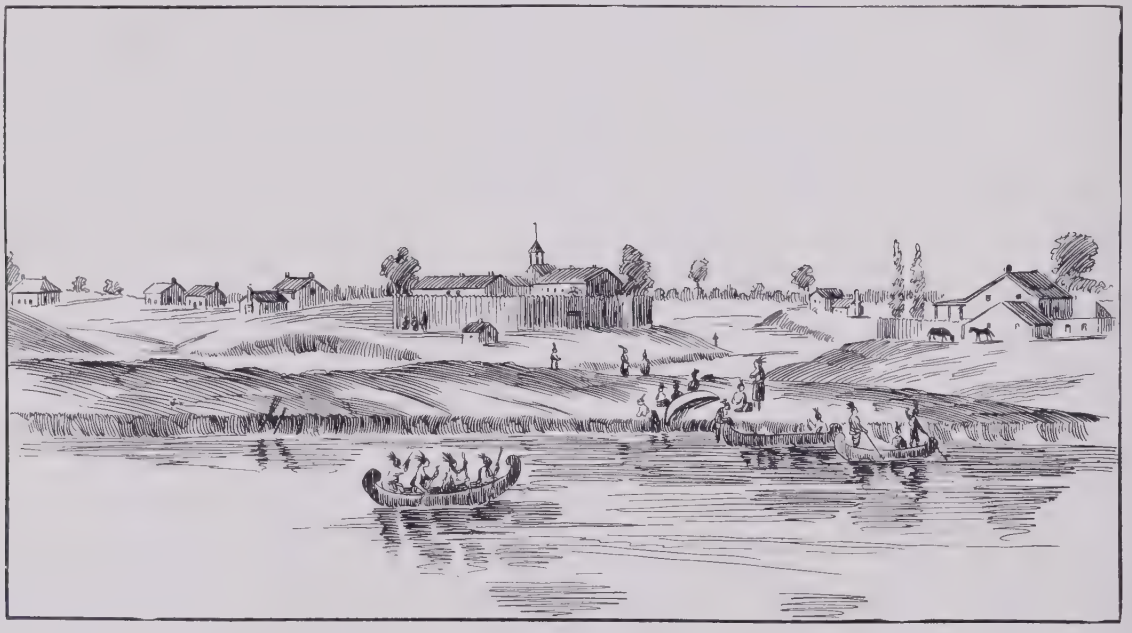
For two years Chicago dropped out of sight, and it was four years that the bodies of the victims of the butchery remained unburied. John Kinzie left his home and the Indians had their own way in all this region. Chicago was a scene of desolation. No attempt was made to re-establish civilized life on the banks of "Garlick Creek" until after the second war with England was over.

It was in July, 1816, that the order to rebuild Fort Dearborn was issued, and in accordance with said order Captain Hezekiah Bradley, with two companies of infantry, took possession of the old ruined fort and proceeded to rebuild the same. One of the first duties, however, of the captain and the men under him was the burying of the skeletons of the dead victims of the massacre at the time of the evacuation of the fort. This done, they proceeded to rebuild their home, which was done in a more careful and substantial manner than before. John Kinzie and his family came back, and occasionally other settlers straggled in to renew the process of civilizing the six-mile tract belonging to the government. The Indians were still numerous, but so far as the record goes were never afterward unfriendly. In 1818 the American Fur Company established a branch office here, which enlarged the commercial transactions about the fort. By 1820 there was quite a village, a half dozen or more comfortable cottages, which, together with the soldiers of the fort and the Indians about, made things appear quite lively. About this time (1820) Chicago was honored with an unusual visitation. Governor Cass, with a number of other gentlemen, was making an official expedition through the Northwest and visited Chicago. Accompanying this expedition was Henry R. Schoolcraft, who seemed delighted with Chicago and its surroundings. Mr. Schoolcraft, although he went out as a mineralogist, seems to have been the scribe and reporter for the party. He says that General Cass and party reached the village (Chicago) about 5 o'clock on the morning of August 29, 1820. "We found four or five families living here, the principal of which were those of John Kinzie, Dr. A. Wolcott, J. B. Beaubien and J. Crafts, the latter living a short distance up the river. The Pottawottamies, to whom this site is the capital of trade, appeared to be lords of the soil, and truly are entitled to the epithet if laziness and an utter inappreciation of the value of time be a test of lordliness." "We found the post, Fort Dearborn, under the command of Captain Bradley, with a force of 160 men. The river is ample and deep for a few miles, but is utterly choked by the lake sands, through which, behind a masked margin, it oozes its way for a mile or two till it percolates through the sand into the lake." Mr. Schoolcraft seems to have been something of an artist, and while he was there he took a sketch of the village, as he says, "from a standpoint on the flat of sand which stretched out in front of the place." The cut herewith presented is a copy of Mr. Schoolcraft's sketch, which he says, "embraces every house in the village, including the fort." Of the country he says: "The country around Chicago is the most fertile and beautiful that can be imagined. It consists of an intermixture of wood and prairies, diversified with gentle slopes, sometimes attaining the elevation of hills, and it is irrigated with a number of clear streams and rivers, which throw their waters partly into Lake Michigan and partly into the Mississippi River. As a farming country it presents the greatest facilities for stock-raising and grain, and is one of the favored parts of the Mississippi Valley. The climate has a delightful serenity, and it must, as soon as the Indian title is extinguished, become one of the most active fields for the emigrant. To the ordinary advantage of an agricultural market town it must add that of being a depot for the commerce between the northern and southern sections of the Union, and a great thoroughfare for strangers, merchants and travelers."

From this it will be seen that Mr. Schoolcraft was much more enamored with the situation of Chicago than most of the early travelers through this region. He saw, too, the advantages of this location from a commercial point of view, and the years since have shown that he was correct in his estimates of the importance of this location for commerce and enterprise. It is in fact true of nearly all the early visitors of Chicago that they saw great commercial advantages for Chicago—even when it was only a site it seemed to warm the imaginations of the Jesuit fathers, Marquette and Joliet, more than any other point they visited in all their wanderings. Already Chicago has more than justified their far-sighted wisdom, but the present has more promise for the future than 1820 or 1830 had. The indications now are that in the next seventy years wealth, population, commerce, education, art and all things that relate to the higher life and civilization of a people will increase more rapidly than they have in the last seventy years. It will require more wisdom to prepare the present city to become the wonderful city Chicago should be in 2070 than was required of its founders and builders to produce the city of to-day. Faith and energy were the principal requirements of the founders, but the men that make this city what it should be at the end of the next seventy years must have, in addition to those qualifications, intellectual culture, practical wisdom, high ideals and courage to do and dare. The place where Chicago stands was created for great things, and if citizens of the city and state do their duty that design will be realized before the close of the twentieth century.

Up to 1823 the place was more generally known as Fort Dearborn than as Chicago, the military post being the principal feature of the settlement, but in 1823 the post was again evacuated and for five years continued vacant. During that time the designation "Fort Dearborn" almost entirely disappeared, and the place got its proper name, Chicago. After the evacuation of the fort the only government representative that remained was Dr. Alexander Wolcott, the Indian agent, who still retained his office here. Chicago was then a part of Peoria County, and in the congressional election of 1826 cast 35 votes.

In 1830 William Howard, a United States civil engineer, made a survey of the general location of Chicago, with especial view as to its relations to the Chicago River and the lake. His drawing and report gave the best idea of the Chicago River of that early day that can anywhere be found. The sketch is here reproduced, and the beach of sand from which Mr. Schoolcraft drew his sketch of infant Chicago, ten years previous, is plainly shown. The Commissioner of the General Land Office, at the time of reporting this survey, sent the following letter to Congress in regard to the same, inclosing the sketch:



VIEW OF CHICAGO IN 1820, BY HENRY R. SCHOOLCRAFT.

"GENERAL LANDOFFICE, March 22, 1830.

"Sir:—I take the liberty to inclose you a diagram, exhibiting the survey of the public lands lying on Lake Michigan, at the mouth of Chicago Creek, and would recommend that an act be passed, authorizing the President to lay off a town at this point. Section 9 has been allotted to the State of Illinois, under the act granting

to her certain lands for the purpose of making a canal.

"Should the United States establish a town at the mouth of the creek, the state would probably derive much benefit by extending the lots into Section 9, as Chicago Creek affords a good harbor through the whole of this section.

"It is understood that the waters of Lake Michigan may be drawn into the Illinois River, by a thorough cut of moderate length, and not more than seventeen feet deep at the summit; when this is affected, and the bar on the outside of the mouth of Chicago Creek is so deepened as to admit into the harbor with facility vessels of the largest class navigating the lakes, Chicago must inevitably become one of the most important depots and thoroughfares on the lakes.

"The government are about bringing into market a vast extent of country between Lake Michigan and the Mississippi River, which, as to advantages of local position, fertility of soil, healthfulness of climate and mineral resources, is not perhaps excelled by any other tract of country of equal extent in the United States. The deepening of the inlet of the harbor of Chicago would essentially facilitate the sale of these lands and promote the settlement of the country.

* * * * * *

"With great respect, your obedient servant,

"GEORGE GRAHAM."

It will be seen by the above that the writer took a great interest in the embryo city of Chicago, and that even then, when nobody ever thought of Chicago needing any other drainage receptacle than the lake, he called attention to the fact that the waters of Lake Michigan could be easily turned into the Illinois River by making a cut of moderate length and not more than seventeen feet deep at the summit; in fact, nearly all the pioneers were especially attracted to Chicago on account of the ease with which a waterway could be made joining the lake with the Mississippi River through the Chicago, Desplaines and Illinois rivers. With this fact so prominent in the minds of the earlier explorers, it seem strange that such an enterprise should have been delayed so long as it was. Of course, in those days they did not have such big ships and boats as are now necessary on the lakes and rivers, and to make a navigable stream then required no such a great waterway as our present drainage board have provided. Now, however, that Chicago has spent $33,000,000 in beginning this great work, it will be stranger still if the national government does not follow it up and carry out the idea of the early pioneers and connect the great chain of lakes with the Mississippi River. In no other way can such an extent of navigable water communication be created on the continent.

After the evacuation in 1823, the fort remained unoccupied until 1828, when a new garrison was stationed here, remaining until May, 1831. But it only remained vacant about one year. Owing to the emergencies of the Black Hawk war, the government again stationed a force at this port, and the action proved very fortunate, as the fort afforded a refuge for frightened settlers for long distances around. After the peace that followed the Black Hawk war had become apparently permanent, the troops were again, on December 29, 1836, removed from the fort, and Chicago from that time on took care of herself without the assistance of the war department. Chicago now became a place of comparative activity, looking forward to a position in the commercial world. The year 1837 was quite an important year. Chicago was incorporated as a city and elected her first mayor. In later years the "old settlers" were those who had come to Chicago in 1837 or previously. Anybody that came later was barred that title, or at least barred out of the association as ineligible to membership. In fact, however, it was as far back as 1830 that Chicago began to show evidence of ambition to realize the dream of Joliet and to display signs of commercial life. Before that, however, it had gained very slowly. From 1816 to 1830 it had gained only twelve or fifteen houses and a population of about 100.

A side light is thrown upon the Chicago of that period by the records of the assessor of Peoria County in 1825, seven years after Illinois became a state. There were only fourteen taxpayers in the "Chicago precinct," including John Jacob Astor's Fur Company. More than one-half the assessable property of the place belonged to Astor, whose name now figures as that of one of the shortest but most aristocratic streets of the city. Astor's tax was $50, on a valuation of $5,000. The totals, without counting Astor's Fur Company, were: Valuations, $4,047; taxes, $34.47.

It was not until the last vestige of Indian occupation in bulk had disappeared from Illinois that Chicago began to grow. The Keokuk treaty of 1830 was designed to rid the state of these obstructions, but Black Hawk refused to go. His people occupied a large area of Northern Illinois. The Black Hawk war closed with his capture in 1833. Soon after in the same year not less than 5,000 Indians assembled at Chicago to treat for the sale of their remaining lands in Northern Illinois and Southern Wisconsin. It was a tedious process. The Indians did not want to sell, but the hour had come and the assembled red men finally bowed to the inevitable.

The original town of Chicago was laid out in 1830. It extended from Chicago avenue on the north to Madison street on the south and from State street on the east to Halsted street on the west. All east of State

FORT DEARBORN IN 1853 FROM THE SOUTHWEST.

street was subject to overflow from the lake. The West Side was substantially unbroken prairie. Real estate speculation began, in a mild form, not reaching the fever point until the red men were well out of the way. The first bridge was erected over the south branch. That was in 1831. Three years later a drawbridge was erected which spanned the main river at Dearborn street.

The first census of Chicago was taken in 1835. It was taken by the town authorities. It showed a population, in November of that year, of 3,255 souls. There were 398 dwellings, four warehouses, twenty-nine dry-goods stores, nineteen grocery and provision stores, five hardware stores, three drug stores, nineteen taverns, twenty-six saloons, seventeen law offices. The first Cook County courthouse was erected that year, and on the northeastern corner of the present courthouse square. Chicago was then beginning to get on.

The first step toward a city charter for Chicago was taken in October, 1836. The town trustees and delegates from the three divisions met in conference to frame a charter. Their work done, it was submitted to the people in mass meeting assembled. With slight changes it was approved. The charter was then taken to the General Assembly, which convened at the beginning of 1837. It was passed and approved March 4, 1837, the same day that Martin Van Buren was inaugurated President of the United States. That original city of Chicago had six wards. William B. Ogden was elected mayor. The whole number of votes cast at the first municipal election in Chicago was only 709. It was between the time that Chicago decided to ask for a city charter and the time it actually got it that it really ceased to be Fort Dearborn, for the garrison was withdrawn December 29, 1836.

It was about this time that the great era of speculation in town lots and of internal improvement by states set in. Chicago was included in one, Illinois in the other. It was a wild storm of great expectations. Nothing could stand before it. Its fury was unabated till the crash of 1837 came. The city of Chicago was still in its cradle, its age counted by months, when the collapse came. Lots which had been bought only a little while before for a few hundred dollars were sold for thousands of dollars, and everything seemed to betoken wonderful prosperity. The collapse came and the fall was greater than the rise. From 1837 to about 1840 was a period of great depression and hardship. Chicago was what the vernacular of to-day calls "a busted boom town." To make the misery more complete, drought fell like a blight upon the prairie farmers and an epidemic of cholera visited the little poverty-stricken city.

It was not until 1842 that Chicago gave signs of recovery from the depression, and then only faint and feeble.

The decade of the forties may be set down as a period memorable for its beginnings. In his "Story of Chicago" Major Joseph Kirkland makes this brief summary on this point:

"The forties saw the beginning, in a small way, of nearly all the great institutions Chicago now enjoys. In 1841 the first waterworks were built. The first propeller was launched in 1842, in which year the exports were for the first time greater than the imports. The first book compiled, printed, bound and issued is said to have been in 1843. The first meat for the English market was packed in 1844. The first permanent public school building was built in 1845. In 1846 the River and Harbor Convention met and Chicago was made a port of entry. In 1847 the first permanent theater was opened (Rice's; south side of Randolph street, between State and Dearborn streets), and McCormick's reaper factory was started. In 1848 the first telegram was received, being a message from Milwaukee, and later the 'Pioneer,' our first locomotive, was landed from the schooner Buffalo and started out on the Galena railway. In the same year the Board of Trade was established and the canal opened. In 1849 the Chicago & Galena Union Railroad was opened to Elgin."

We have now reached a point in the history of Chicago where we must deal with a great city, not the beginnings of one. As the ground on which it stands was long in getting out from under the dominion of the lake, and our river was long a mere pool slowly rising to the dignity of a fresh water estuary, so the city itself made hard work of getting a start. There were at least three cities in the state, Shawneetown, Galena and Alton which gained no inconsiderable importance while Chicago was having a baffling struggle for bare existence. But about the time the city charter was granted the municipality entered upon its career, and from this

CITY HALL.

time on we are not to deal with a rivulet. The municipal river is not only widening, but really has an ever-increasing number of branches, each of which invites to historical exploration. They will be explored, so far as practicable, in the order of their beginnings. This topical indistinction from chronological method seems best suited to a presentation of the past experiences of a great city, as the biographical method is to a presentation of its present life.

MILE STONES IN CHICAGO'S WONDERFUL GROWTH.

1803.

Fort Dearborn built by Captain John Whistler and Lieutenant James S. Swearingen of the United States army, in command of a company of United States troops from Detroit. The post was named in honor of General Henry Dearborn, then secretary of war. Population, seventy-five.

1804.

John Kinzie and his family become the first white settlers under the United States, following the soldiers from Detroit to trade with the Indians. He brought with him his wife and young son. In that year Ellen Marion Kinzie was born, the first white child of the settlement. Mr. Kinzie died here in 1828.

1805.

The first lawyer, Charles Jewett, came to Chicago and was appointed the first Indian agent for the Pottawattamies, and other nearby tribes.

1806.

Efforts made by Tecumseh, the famous Indian chief, and his brother, the Prophet, to form a confederacy of the Indians against the whites at Fort Dearborn and other western settlements.

1810.

The first doctor, John Cooper, surgeon mate, U. S. A., came to Chicago, being detailed for duty by the war department at Fort Dearborn. The Pottawattamies opened warfare against the settlement. First suggestion of government connecting the Chicago and Illinois river by canal by way of the portage.

1812.

August 5, occurred the massacre of the garrison of Fort Dearborn, together with a number of settlers on the south shore. Captain Nathan Head was ordered to evacuate the fort and retreat to Detroit, as a result of the hostilities between the United States and England. Fort Dearborn was burned by the Indians. Population, one hundred and ten.

1813.

Phillip Fouche appointed as first United States marshall for the district embracing Chicago.

1816.

Captain Hezekiah Bradley arrived in command of two companies of infantry and rebuilt Fort Dearborn. The Indian agency and warehouse reëstablished. Kinzie family returned. Population, one hundred and fifty.

1817.

Route between Chicago and Mackinac Island established by the schooners Baltimore and Hercules.

1818.

Illinois admitted to the Union as a state. The American Fur Company established agency here.

1821.

First government survey of the shore line of Lake Michigan off Chicago made.

1822.

Alexander Beaubien baptized by the Rev. Stephen D. Badin.

1823.

Fort Dearborn evacuated by federal troops. Dr. Alexander Wolcott remained in charge as Indian agent. His wedding to Miss Ellen Marion Kinzie celebrated, the first marriage in the settlement. Mrs. Wolcott died in Detroit in 1860. Illinois and Michigan canal bill passed by legislature.

1824.

Survey for the Illinois and Michigan canal is made.

1825.

The first Protestant sermon preached in Chicago October 9, by the Rev. Isaac McCoy, a Baptist clergyman. Chicago still a part of Peoria County. Population, two hundred.

1826.

Election for congress and for governor held. Only thirty-five votes were cast.

1827.

First slaughter house built by Archibald Clybourne on north branch of the river, which was forerunner of great packing industry. First company of militia organized..

1828.

Fort Dearborn is regarrisoned by Federal troops. John Kinzie died.

1829.

Wolf Tavern built at the forks of the river by Archibald Caldwell and James Kinzie. First ferry established near site of present Lake street bridge.

1830.

Chicago surveyed and platted and first bridge built over the river at Randolph street. Population, five hundred.

1831.

Cook County formed and Chicago made county seat. First county building erected. First postoffice

established with Jonathan N. Bailey as postmaster. First Methodist church built and first government lighthouse established at harbor mouth.

1832.

First store built of boards, put up by Robert Kinzie on west side of river. First drug store established by Philo Carpenter. Four companies of militia volunteer for Blackhawk war and General Winfield Scott arrived July 8, with regular troops. First sawmill established and first meat packed and shipped. Steamer Sheldon Thompson brought cholera to town.

1833.

Chicago incorporated as a town. First newspaper established, The Democrat, by John Calhoun. The first public school opened with an enrollment of twenty-five. First log jail built, five trustees for town elected and code of municipal laws adopted. First shipment of merchandise from Chicago taken out by schooner Napoleon. First Roman Catholic parish, St. Mary's established by the Rev. Father John St. Cyr. First Presbyterian congregation formed by the Rev. Jeremiah Porter. First fire department organized with Benjamin Jones as chief. An appropriation of $25,000 for the improvement of the harbor made. First Tremont house built. Block on which new postoffice stands sold for $550. Population, eight hundred.

1834.

The city floated its first loan. First Episcopal church, St. James, established by the Rev. Isaac W. Hallam. First mail route established between Chicago and Detroit by Dr. John H. Temple. The first drawbridge built across the river at Dearborn street. The first vessels to navigate river were the steamer Michigan and the schooner Illinois. The first piano brought to town by George J. B. Beaubien. The first divorce is granted, and the first murder trial concluded. Population, 1,600, number of votes cast at election, 528.

THE GOVERNMENT BUILDING

1835.

The first courthouse, a one-story and basement brick structure, built on the southwest corner of Clark and Randolph streets. United States land office opened with a rush. The first Chicago bank opened, branch of the Illinois State bank. Board of health organized. School census taken. Population, 3,279.

1836.

First ground broken for Illinois and Michigan canal July 4. The Clarissa the first sailing vessel built in Chicago launched. The garrison quartered in Fort Dear

COLUMBUS MEMORIAL BUILDING.

born since 1828, withdrawn and site abandoned as an army post. William B. Ogden's house built from architectural designs, the first of its kind in the city. The Galena and Chicago Union Railroad chartered. Presidental vote of Cook County 1,043.

1837.

The City of Chicago incorporated and first city election held. Daniel Webster visited city. First census of city showed a population of 4,170. First theater opened. First financial panic.

1838.

First side-wheel steamer, the James Allen, built. First steam fire engine purchased. The first exportation of wheat, seventy-eight bushels, took place. Congressional vote, 2,506.

1839.

First big fire cost the city $75,000. First job printing office opened, and first daily paper, The American, published. Thanksgiving publicly observed for the first time. First brewery established.

1840.

The public free schools were reorganized and made permanent. Scammon's reports were issued, the first book published in Chicago. First Clark street bridge built. Population, 4,470.

1841.

First wave of temperance struck the town and 150 took the pledge in three days. Bridge built at Wells street.

1842.

Forty merchants pass through bankruptcy courts. Works of Chicago Hydraulic Company put in operation. The Independence, the first propeller launched. It was the first steamboat to navigate Lake Superior. Ex-president Van Buren visited the city.

1843.

Corn and wheat make low record in February, corn selling at 18 cents and wheat 38 cents a bushel. First Chicago directory published in book form. First session of Rush Medical College held. A tri-weekly express service established between Chicago and the East.

1844.

Tornado wrecks many houses and shipping in the harbor. Great boom in building, 600 houses erected. First fire alarm bell installed. St. Mary's of the Lake University established. Dearborn school, first permanent school building erected at a cost of $7,500. Population, 12,000.

1845.

First power printing press brought here by "Long John" Wentworth, editor of the Democrat. County court established.

1846.

July 13 Chicago made a port of entry. Holy Name St. Peter's, St. Patrick's, and St. Joseph's churches established. Recruiting for Mexican war kept town in ferment. First levy for special assessments made.

1847.

River and Harbor convention met in Chicago. Rice's theater first opened. First law school opened, and first patients received in hospital.

1848.

First telegram received in Chicago from Milwaukee on April 15. April 10 the first boat passed through the Illinois and Michigan Canal. October 25, an engine and

two cars were run over the first five miles of track of the Galena railroad. First session of the new United States court was held. An epidemic of smallpox reigned and vaccination was general.

1849

Storms and flood damage shipping to the extent of $100,000. Waters of Desplaines and Chicago rivers unite in great flood, which tears away all bridges. Tremont house again burned, together with twenty other buildings. Another epidemic of cholera and thirty deaths occur on one day. Panic among banks. Presidential vote, 3,832.

1850

Galena and Chicago Union Railroad opened to Elgin. First gas is turned on in city mains. First opera is given. First streets paved with planks, Stephen A. Douglas made his great speech. Federal census gives Chicago 29,963 population.

1851

Trouble with Michigan Southern Railroad over its contentions of prior rights into Chicago was settled in an opinion by Douglas, which declared that the Illinois Central and the Rock Island roads were entitled to come into the city over their own tracks to their own terminals.

1852.

Chicago's first big loan floated for $250,000 for building the new waterworks. First train is run into the city over the Michigan Southern, arriving in Chicago, February 20. First train on Michigan Central arrives May 21. City waterworks operated for first time. Northwestern University is located in Chicago, and superintendent of public schools appointed. Presidential vote, 5,024.

1853.

Chicago had its first labor strike. New courthouse is occupied. Ole Bull given an ovation. Wreck at Grand Crossing in collision between Michigan Southern and Galena road, killed eighteen persons. Douglas hooted down while attempting to speak in defense of Kansas-Nebraska bill.

1854.

First train on the Chicago and Rock Island road arrived June 5. Illinois Central makes Chicago headquarters instead of St. Louis. Cholera epidemic.

1855.

First train on Chicago, Burlington & Quincy Railroad run as far as Burlington, Iowa, May 30. Main road of Illinois Central completed. Attempt to enforce Sunday law caused riot, one man killed and several wounded. First state agricultural fair held October 9, on the canal near Blue Island avenue. Nearly 1,500 deaths occurred from cholera.

1856.

First high school opened. The Chicago Historical society organized. First ordinance for street railway on State street from Randolph to southern limit of city passed. First sewers are laid and first iron bridge is swung across Rush street. Present grade level of street

GREAT NORTHERN BUILDING.

was established after strong opposition. First direct clearance for European ports by the schooner Dean Richmond. First steam tug in the river. Presidential vote, 11,615.

1857.

Great financial crisis, banks in panic and city orders went to protest. Great fire in South Water and Lake streets, caused $500,000 loss. McVicker's theater first opened. Population 93,000, and Chicago recognized as the metropolis of the Northwest.

1858.

The first street car was run in State street and the first paid fire department was organized.

1860.

Steamboat Lady Elgin was lost on September 8, and 293 persons perished. The United States census gave Chicago a population of 109,260. The presidential vote was 18,985.

1861.

The famous Camp Douglas was established at Cottage Grove avenue and Thirty-ninth street, at the outbreak of the war of the rebellion.

1862.

The first internal revenue collector was appointed.

1863.

The city limits are extended to include Bridgeport and Holstein. Up to this time 400 miles of street had been improved and twenty-nine miles had been graveled.

1864.

Work was begun on the first water tunnel at the land shaft March 17. Special assessments were tied up for a year by court proceedings against the law.

1865.

The first tunnel crib was launched July 24. The Union Stock Yards were opened for business and the first fire-alarm telegraph was installed.

1867.

Lake water tunnel was completed and the pumping station and tower at Chicago avenue was built.

1869.

Great celebration held over the completion of the Washington Street tunnel. Courthouse built in 1851 was enlarged by the addition of two wings and another story. The park act was passed. Total tax was $3,990,373 and the bonded debt $7,882,500.

1870.

Bonded debt is increased to $11,041,000. United States census gave Chicago a population of 306,605.

1871.

The great fire occurred on October 7, 8, 9, 10 and 11, causing a loss of $290,000,000. Nearly twenty thousand buildings were destroyed. On the West Side 194 acres were burned over, on the South Side 460 acres, and on the North Side 1,470 acres. The La Salle Street tunnel was dedicated.

1872.

Over $30,000,000 is spent in rebuilding the city. Great influx of population because of labor required in building.

1873.

Great rebuilding operations continued. Financial panic which affected the whole country struck Chicago. The United States sub-treasury established. Public library opened.

1880.

Federal census gave Chicago a population of over a half a million or 503,185.

1882.

Cable trains first installed and operated on the Chicago City Railway, in State street and Wabash avenue.

1883.

Present city hall and county building were completed.

1885.

First investigation made for building drainage canal.

1886.

Serious riots led by the anarchists took place in Haymarket square on the West Side, many policemen were killed by the explosion of a bomb.

1889.

Sanitary district of Chicago organized and the building of the great drainage canal planned.

1890.

Chicago's population passed the million mark and according to the federal census the city became the second in size in the United States, with 1,105,540 inhabitants. Sanitary district organized.

1892.

Columbian Exposition built in Jackson Park. First elevated railroad put in operation. Ground broken for the building of the drainage canal. Rockefeller rejuvenates the University of Chicago.

1893.

World's fair opened and broke all records for magnitude and attendance.

1894.

Great strike inaugurated by the American Railway union under Eugene V. Debbs. President Cleveland called out federal troops to assist police and Illinois National guard in maintaining order. Moore Brothers become involved through operation in Diamond Match

and National Biscuit stock, and fail for $5,000,000, causing temporary closing of Chicago Stock exchange.

1896.

Greatest political parade in history when 100,000 sound-money Republicans and Democrats get into line.

1897.

New Public Library building dedicated. Joseph Leiter forces a corner in wheat and runs up the price to $1.87 a bushel on Board of Trade. Failure followed in which his losses aggregated over $5,000,000. Levi Z. Leiter comes to his relief and makes complete settlement.

1898.

Union Elevated loop built.

1899.

Drainage canal is dedicated and water is turned into the channel. Corner stone of the new postoffice and federal building is laid by President McKinley, October 9.

1900.

Federal census gives the population of Chicago as 1,698,575. Formal opening of drainage canal January 17.

1901.

George H. Phillips cornered May corn and ran price up to sixty cents a bushel. Chicago teachers federation get supreme court decision for taxing property of corporations on same basis as property of individuals.

1902.

Movement for new city charter begun in October.

1903.

Centennial celebration of the founding of Chicago and the building of Fort Dearborn. New Iroquois theater pronounced absolutely fireproof burned, and 575 men, women and children suffocated and burned to death.

1904.

Theaters all closed as result of Iroquois fire. Mayor Harrison, building commissioner and theater officials held to grand jury. New building ordinance passed providing for complete fire protection in theaters and public buildings. Orchestra hall, permanent home for Thomas Orchestra, dedicated.

1905.

Theodore Thomas died in January. General teamsters strike.

FLORAL DISPLAY, HUMBOLDT PARK.

CHAPTER IV.

THE GROWTH AND THE MAYORS OF CHICAGO.

HE municipality of Chicago has never fully kept up with its tremendous growth in commerce and population. The civic problems presented have no sooner been solved than others have developed. At the beginning of the city's second century it is still struggling for a wider and more comprehensive city government and for a municipal machinery capable of handling its affairs. The movement for the new city charter, begun in October, 1902, has as yet (1905) borne but little fruit. That Chicago will come into her own by securing an adequate municipal code of laws and schemes of government is a promise of the near future. The demand for such a charter is becoming more urgent every year, and in the gradual process of evolution such a plan will be worked out as will give the city a municipal machinery consistent with its greatness.

Chicago first became a municipal entity on February 11, 1835, when the original Town of Chicago was incorporated. Its boundaries at that time were Twelfth street on the south, Halsted street on the west, and Chicago aveune on the north. The three sections of the city even at that early day were grouped about the Chicago river. On March 4, 1837, the City of Chicago was incorporated and the limits extended to Twenty-second street on the south, Wood street on the west, and North avenue on the north. The territory embraced within the original city limits was 10.635 square miles and the population 4,170. At the end of the city's first century it had grown in territory to 190.638 square miles, and contained approximately 2,000,000 inhabitants.

In the first ten years the city quadrupled in population and spread out further and further from the downtown business center. On February 16, 1847, the first annexation to the city was made, consisting of 3.275 square miles of territory lying along the western boundary between Wood street and Western avenue. It also included the original tract from which Lincoln park has been developed. The second extension came five years later, the city having in the meantime increased to a population of over 60,000. The additions were made to all sides of the city, south, west and north. This increase was a little less than four square miles. From then on until after the war Chicago began to grow by leaps and bounds. By 1860 the city had gone beyond the 100,000 mark, and on February 13, 1863 the boundaries were again extended in all directions, on the south to Thirty-ninth street, on the west to Western avenue and on the north to Fullerton avenue, the area taken in aggregating 6.284 square miles, giving the city 150,000 inhabitants. Six years later large additions were made to the west and northwest sides, the boundaries on the west being extended to Fortieth avenue. The increase in territory at this time was 11.38 square miles, making a total area of 35,562 squqare miles, an increase in area of 250 per cent since 1837. The population by this time had reached the quarter-million mark. In 1887 one square mile of the township of Jefferson was annexed to the northwest and two years later another square mile of the same township was added and the western boundaries were extended to Forty-sixth avenue and Forty-eighth avenue. This made the total area of the city, on April 29, 1889, 43.712 square miles. The population of the city proper and its adjoining suburbs had reached the million mark. On July 15, 1889, Chicago's greatest gain in area was made. On the south the great village of Hyde Park was annexed, the town of Lake was taken in to the northwest, part of Cicero to the west, the town of Jefferson to the northwest and the city of Lakeview to the north, a

total of 126.07 of square miles of territory being added to the city. This brought the total up to 169.782 square miles and gave the city a population of approximately 1,100,000 inhabitants. Since then numerous small additions have been made, the outlying suburbs being admitted whenever they knocked for admission. These annexations were made in the order named: The village of Gano to the south in the Calumet district, South Englewood, Washington Heights and West Roseland, admitted during the year 1890; the village of Fernwood admitted in 1891; the village of Westridge and Rogers Park and Norwood Park in 1893; part of the town of Calumet in 1895 and Cicero and a part of Austin in 1899. This last addition brought the total area up to 190.638 square miles.

Chicago's longest distance, from One Hundred and Thirty-eighth street on the south to Howard avenue in Rogers Park on the north, is 25.5 miles. From the Indiana boundary line at One Hundred and First street and the lake, the shore line north to Howard avenue, including all indentations, is exactly 134,801 feet or 25.23 miles. The city's greatest width from east to west is at Seventy-eighth street, the distance from the shore to Forty-eighth avenue being 10.5 miles. The greatest width on the North Side is at North avenue. From the shore line to North Seventy-second avenue on the west is 9.25 miles. Western avenue is the longest street in the city, extending from One Hundred and Seventh street on the south to Howard avenue on the north for a distance of 22.16 miles. Ashland avenue if cut through between the same points would be the same length. From One Hundred and Fifteenth street to One Hundred and Twenty-third street, Ashland avenue forms the western boundary of the city for one mile, which if added to it would make it 23.16 miles long. Halsted street comes next. Beginning at Calumet river at about One Hundred and Thirty-second street and extending to the lake on the north it covers a distance of approximately 21.4 miles.

As to the population at the present time (1905) there seems to be no accurate information. That it is well over the two million mark is generally admitted. The estimates for 1904 varied all the way from 1,714,144 to 2,241,000. The school census was taken as the basis for the first estimate and the city directory for the latter. The census bureau in Washington for 1905 gave the estimate of Chicago at over 1,900,000. In compiling the city's vital statistics for 1904, the health department used as a basis the mid-year estimate of 1,932,315 inhabitants. That it is well over the two million mark is believed by many competent judges.

The last federal census taken in 1900 shows Chicago's population to be divided in point of nationality as follows: German, including those whose parents were

HUMBOLDT PARK.

born in Germany, but themselves in America, 534,083; Irish, figured on the same basis, 254,914; native Americans whose parents were also American, 384,122. The native population of persons born in the United States was 1,111,463. Of these 769,882 were born in Illinois. This leaves 727,341 who were of foreign birth. Of this number 170,738 were born in Germany and 73,912 in Ireland. Other nationalities are represented as follows by those of foreign birth and whose parents were of foreign birth: Swedes, 144,719; Poles, 167,383; Bohemians, 109,224; Norwegians, 59,898; English, 72,876; Russians, 61,974; Canadians, 48,304; Italians, 42,054; Colored, 30,150; Austrians, 29,760; Scotch, 28,529; French, 21,026. The rest of Chicago's cosmopolitan population is made up of from nearly every people on the face of the earth. China, India, Finland, Japan, Roumania, Turkey, Wales, Switzerland, Hungary, Greece and the Islands of the Sea are all represented.

CHICAGO STOCK EXCHANGE BUILDING.

Chicago's city government consists of the following elective officers, all chosen for a period of two years: Mayor, city clerk, city attorney, city treasurer, and city council, consisting of seventy alderman, two for each of the thirty-five wards of the city. The mayor receives a salary of $10,000 a year, and the city clerk

and city attorney each $5,000, and the city treasurer 25 per cent of the interest allowed by the banks on the city's deposits. The aldermen are each paid $1,500 a year. Half of the aldermen are elected each spring.

The total appropriation for the city for 1905 aggregated $34,084,910. Of this amount $23,525,193 was set aside for city purposes, $10,159,717 for schools and $400,000 for the libraries. The expenditure for city purposes for the year ending December 31, 1904, aggregated $22,806,949. The general government of the city for 1904, including all the departments outside of the public safety and public works department, cost $2,033,255. For public safety was spent $6,074,369. Under this head come the police department and minor courts, the house of correction, the fire department, health department, hospitals, public pounds and municipal lodging houses. The public works department for 1904 spent $8,449,049. Under this head come the bureau of streets, sewers, local improvements, electricity and water works. For public recreation and art was spent $20,201.31. This was mainly devoted to public play grounds. It cost the city to pay its judgments and damage claims, $5,118,897 for 1904.

The total bonded debt of Chicago outstanding December 31, 1904, was $22,618,000. This showed an increase of $7,495,000 over the preceding year. During 1904 judgment funding bonds aggregating $5,225,000 and permanent improving bonds of $3,000,000 were issued.

The city of Chicago in its general government, public safety, public works, water works, board of education and miscellaneous departments employed during 1904 17,029 persons, to whom was paid in salaries $16,270,007.24. The greatest share of this was paid for education, $6,386,957 being the salary list of Chicago's school teachers. Public safety cost in salaries alone $5,332,969, three-fifths of this amount going to the police department.

The city owns 341 school buildings, containing 4,905 rooms. The value of these structures, with their sites and furniture, is $31,135,900. The board of education besides this rents buildings containing 138 rooms. This gives a seating capacity of 252,324. The board has under construction nineteen new school buildings, costing $2,735,000, including 414 class rooms. The usual seating capacity per room is forty-eight pupils. The construction of forty-two new school buildings to cost $5,300,000, and containing 658 class rooms, have been ordered built. The value of the board's property other than that used for school purposes is $9,221,457.33.

The total enrollment of schools for the school year ending in June, 1905, was 282,346. Of this number 142,210 were boys and 140,136 were girls. The percentage of attendance was 94.4, and the total membership of the schools at the close of the school year was 234,733, divided as follows: Normal school, 288, high schools, 10,356, grammar department, 76,370, primary department, 138,429, kindergarten, 9,111, and schools for the deaf, 179. The total number of teachers employed at the end of the school year was 5,716, or about one for forty-one pupils. The work of the schools in citizenship building is shown by the number of pupils in elementary grades studying manual training, cooking and sewing, cooking being studied at the end of the year by 6,818, sewing by 6,782 and manual training by 12,480 pupils.

The police force consists of 3,135 men in uniform service, to whom are paid $3,331,147 in salaries every year. There are 1,275 members of the fire department, who are paid $1,523,212. The employees of the public works department number 2,914, and the salary list amounts to $2,603,331 annually. The water-works department employs 1,426 men at an annual cost of $1,207,402. The water system consists of ten pumping stations, five lake cribs with 37.7 miles of lake and land tunnels leading to the pumping stations. The water mains aggregated 1,978 miles in 1895, and the total cost of the system up to that time was approximately $37,000,000. In 1904 the water pumped by the various stations in Chicago aggregated 146,280,598,353 gallons and the total revenue of the water system amounted to $4,000,462. In connection with the water-works system the city maintains seven free public baths for men, women and children. During 1904, 944,979 baths were furnished. The city maintains 24,775 gas lights, 6,386 gasoline lights and 5,724 electric lights, aggregating in all 36,890 lights. This furnishes illumination equal to 12,849,400 candle power. Up to January 1, 1905, the city had built 8,543,055 feet of sewers at a cost of $23,394,793. During that time 222,000 house drains were put in. The length of the intercepting sewers planned as an auxiliary system to the drainage canal amounts to 86,642 feet, to cost in the aggregate, together with large pumping stations at Thirty-ninth street on the south and Lawrence avenue on the north, $5,000,000. Up to January 1, 1905, the greater part had been completed at a cost of $4,000,000.

In track elevation Chicago leads the world. Plans have been drawn for the elevation of 709.95 miles of track, of which 138.10 are main track, to cost $51,860,250. Of this amount on January 1, 1905, 425.19 miles has been elevated, of which 82.84 were main tracks. Of the 735 subways to be constructed 360 has been completed. The total cost of this work has been $28,725,250, borne entirely by the railroads. The cost of the track elevation still to be done will aggregate $23,135,000.

These statistics show briefly the physical growth of the municipality of Chicago. In the following chapters are presented in detail the scope of some of the more important departments.

The population, value of property for purposes of taxation, the taxes collected and the debt of the city since its incorporation in 1837 follow:

DATE.	Population.	Total Valuation.	Total Tax.	Bonded Indebtedness.
1837	4,170	$ 236,842	$ 5,905	.....
1838	.....	235,996	8,849	$ * 9,996
1839	.....	94,803	4,664	* 7,182
1840	4,479	94,437	4,721	* 6,559
1841	.....	166,747	10,004	*12,387
1842	.....	151,342	9,181	*16,372
1843	7,580	1,441,314	8,647	*12,655
1844	.....	2,763,281	17,166	* 9,795
1845	12,088	3,065,022	11,077	*10,691
1846	14,169	4,521,056	15,825	*16,045
1847	16,859	5,849,190	18,159	*13,179
1848	20,023	6,300,440	22,051	*20,338
1849	23,047	6,676,684	30,045	*36,333
1850	28,269	7,222,249	25,270	93,395
1851	.....	8,562,717	63,385	.....
1852	48,000	10,463,414	76,948	126,035
1853	60,652	16,841,831	135,662	189,670
1854	75,000	24,392,239	499,081	248,666
1855	80,000	20,992,873	206,209	328,000
1856	84,113	31,736,084	396,652	435,000
1857	.....	36,335,281	572,046	535,000
1858	.....	35,991,732	430,190	.....
1859	.....	36,553,380	543,614	1,855,000
1860	109,206	37,053,512	573,315	2,336,000
1861	.....	36,352,380	550,968	2,362,000
1862	138,186	37,139,845	564,038	3,028,000
1863	.....	42,677,324	853,346	3,422,500
1864	169,353	48,732,782	974,665	3,544,500
1865	178,492	64,709,177	1,294,183	3,701,000
1866	200,418	85,953,250	1,719,064	4,369,500
1867	....	195,026,844	2,518,472	4,757,500
1868	252,054	230,247,000	3,223,457	6,484,500
1869	.....	266,920,000	3,990,373	7,882,500
1870	306,605	275,986,550	4,139,798	11,041,000
1871	.....	289,746,470	2,897,564	14,106,000
1872	367,396	283,197,430	4,262,961	13,544,000
1873	.....	312,072,995	5,617,313	13,478,000
1874	395,408	303,705,140	5,466,692	13,456,000
1875	.....	173,764,246	5,108,981	13,457,000
1876	407,661	168,037,178	4,046,805	13,436,000
1877	.....	148,400,148	4,013,410	13,364,000
1878	436,731	131,981,436	3,778,856	13,057,000
1879	.....	117,970,135	3,776,888	13,043,000
1880	503,298	117,133,643	3,899,126	12,752,000
1881	.....	119,151,951	4,136,708	12,752,000
1882	560,693	125,358,537	4,227,402	12,752,000
1883	.....	132,230,504	4,540,506	12,751,500
1884	629,985	137,326,980	4,872,456	12,751,500
1885	.....	139,958,292	5,152,366	12,695,500
1886	693,861	158,496,132	5,368,409	12,588,500
1887	.....	161,204,535	5,602,712	12,588,500
1888	802,651	160,641,727	5,723,067	12,561,500
1889	.....	201,104,019	6,326,561	13,554 900
1890	1,105,540	219,354,368	9,558,334	13,545,400
1891	.....	256,599,574	10,453,270	13,530,350
1892	1,438,010	243,732,138	12,142,448	18,515,450
1893	1,567,727	245,790,395	11,810,969	18,427,450
1894	.....	247,425,442	12,267,643	17,722,950
1895	1,616,635	243,476,825	14,239,685	17,188,950
1896	.....	244,357,286	12,290,145	17,078,950
1897	.....	232,026,660	12,939,333	17,018,450
1898	†1,851,588	220,966,447	12,207,906	19,922,460
1899	.....	345,196,419	12,359,270	16,825,050
1900	‡1,698,575	276,565,880	17,086,408	16,328,450
1901	....	374,580,440	14,245,294	15,470,000
1902	....	402,495,131	14,039,030	15,123,000
1903	1,873,880	411,424,280	14,815,388	15,123,000
1904	.....	403,281,190	15,994,410	22,618,000
1905	2,000,000	.....	.....	.....

* Floating liabilities. † School census. ‡ U. S. census.

THE MAYORS OF CHICAGO.

Since 1836 Chicago has had forty-eight mayoralty terms, which have been filled by thirty-two individuals. It is a little peculiar that ten men filled twenty-six of these forty-eight terms, and that twenty-two men filled the other twenty-two. B. W. Raymond served two terms; Augustus Garrett two terms; James Curtis two terms; W. S. Gurney two terms; John Wentworth two terms; F. C. Sherman three terms; John B. Rice two terms; Monroe Heath two terms; Carter H. Harrison (the first) five terms, and Carter H. Harrison (the second) four terms.

William B. Ogden, the first mayor of Chicago, was born in Delaware County, New York, in 1805. In 1834 he was a member of the New York Legislature and took an active part in legislation in behalf of the Erie Canal, being an earnest advocate of that enterprise. He came to Chicago in 1835 and became extensively interested in real estate, and was one of the few men who weathered the great financial crash of 1837. He was for many years prominent in all important movements in Chicago, but later returned to New York City, where he made his home until the day of his death, which occurred August 3, 1877.

Buckner S. Morris, the second mayor of Chicago, elected in 1838, was a Kentuckian and settled in this city to practice law in 1834. In 1840 he and Abraham Lincoln were chosen by the Whig convention as candidates for state electors, and in 1860 he was a candidate for governor of the state. In 1864 he was arrested, among others, for conspiracy to release the rebel prisoners at Camp Douglas, but was honorably acquitted.

Benjamin W. Raymond, the third mayor, and also the sixth, being elected in 1839 and afterward in 1842 was born in New York City, and came to this city in 1836. He erected the first woolen factory in the state at Elgin, and was afterward prominent in establishing the Elgin National Watch Company. Mr. Raymond was one of the pioneers in developing Lake Forest as a suburb of Chicago.

Alexander Lloyd, fourth mayor, was elected on the Democratic ticket in 1840, and was a prominent figure in politics of the day.

Francis C. Sherman was the fifth mayor and was twice afterward elected to the same office, being the twenty-sixth and twenty-seventh, his elections taking place in 1841, 1862 and 1863. He came to Chicago in 1834; began business in a small frame hotel on Randolph street, near Fifth avenue. In 1860 he built the Sherman House. For a long period he was prominent in the affairs of the city.

Augustus Garrett was seventh and ninth mayor, having been elected in 1843 and 1845. He came to Chicago in 1836 a very poor man, but amassed a large

fortune before his death, which took place in 1848. He bequeathed a large portion of his estate to found the Garrett Biblical Institute of Evanston.

Alson Smith Sherman was the eighth mayor, elected in 1844. He was born in Barre, Vermont, April 21, 1811, was married February 26, 1833, and arrived in Chicago November 1, 1836. He was a successful builder, making a specialty of masonry, and erected many of the early buildings of Chicago. He was a public-spirited man, was elected alderman twice, one time chief of the fire department, ten years on the board of water commissioners and also school trustee. He was one of the organizers of the Illinois Stone & Lime Company. He retired from business in 1873, and resided at Waukegan until his death in September, 1904.

John P. Chapin, the tenth mayor, elected in 1846, was a prominent commission merchant. He was a member of the city council previous to his election as mayor.

James Curtis, the eleventh mayor, was also the fourteenth mayor, first being elected in 1847 and again in 1850. He was a prominent lawyer, and, like Mr. Chapin, represented his ward, the Third, in the city council previous to his being made chief magistrate.

James H. Woodworth was the twelfth and thirteenth mayor, being elected in 1848 and 1849. He was born in Washington County, New York, and came to Chicago in 1833. He was a member of the legislature in 1842, was elected to Congress in 1854 and assisted Stephen A. Douglas in obtaining the appropriation for the Chicago postoffice and customhouse.

Walter S. Gurnee was the fifteenth and sixteenth mayor, being elected in 1851 and 1852. He was a prominent man for many years in Chicago, and one of the original directors of the Board of Trade.

Charles M. Gray, the seventeenth mayor of Chicago, was elected in 1853. He was a pioneer in the manufacturing of farming implements.

Isaac L. Milliken, the eighteenth mayor (1854), began his career as a blacksmith, served two terms in the city council and was on the judicial bench when he was elected mayor.

HUMBOLDT PARK.

Dr. Levi D. Boone was the nineteenth mayor of Chicago (1855). He was a grandnephew of Kentucky's famous pioneer of that name. He came to Chicago in 1836, and was made city physician in 1848. He was elected mayor in 1855 by the native American party. He also was arrested, like Mayor Morris, in 1864, for supposed conspiracy to free the rebel prisoners in Camp Douglas, but was honorably acquitted.

Thomas Dyer, twentieth mayor (1856), had been a prominent citizen of Chicago for many years. In 1848 he was president of the Chamber of Commerce.

John Wentworth ("Long John") was the twenty-first and twenty-fourth mayor, being elected first in 1857 and afterward in 1860. He was born at Sandwich, New Hampshire, in 1815, and came to Chicago in 1836. He soon became a well-known character. He was a lawyer and editor. He was a Democrat, but a strong anti-slavery man, and both times he was mayor was elected on the Republican ticket. He was a large man, standing six feet six inches in his stockings.

John C. Haines, the twenty-second and twenty-third mayor (1858 and 1859), was born in New York and came to Chicago in 1835. In 1848 he was elected a member of the city council and served for six years. He was a member of the constitutional convention in 1869 and a member of the Illinois Senate in 1874.

Julian S. Rumsey, twenty-fifth mayor (1861), was long a prominent man in business and municipal circles in the city. He was twice president of the board and occupied several important offices.

John B. Rice, the twenty-eighth and twenty-ninth mayor, elected in 1865 and 1867, settled in Chicago in 1847. He built a theater on Dearborn street, near Randolph, which was probably the pioneer playhouse, which he managed until 1857. He was nominated and elected mayor in 1865 on the ticket of the Union party, and was reëlected in 1867.

Roswell B. Mason was the thirtieth mayor (1869). Mr. Mason was elected on a People's ticket. Municipal affairs were in bad shape and there were charges of corruption and peculations by officeholders and contractors, and an aroused public sentiment brought about an era of reform, and Mr. Mason was elected as a reform executive.

Joseph Medill, thirty-first mayor (1871), was elected on the Fireproof ticket, while the city was still a mass of smoking ruins. He was for many years the principal owner and editor of the Chicago Tribune. He was born at St. Johns, New Brunswick, of Scotch-Irish parentage, in 1823. In 1873 he relinquished the office of mayor, and on account of his health took a trip to Europe. Lester L. Bond was elected by the council to serve out his term of office, which he did with great credit under embarrassing circumstances.

Harvey D. Colvin was the thirty-second mayor (1873). He was elected on the People's ticket. He was one of the organizers of the United States Express Company in 1854, and was a long time its general agent in this city. His term of office was rather a stormy one.

DOUGLAS PARK.

Monroe Heath was the thirty-third and thirty-fourth mayor of Chicago, being first elected at a special election under the amended charter of the city in the summer of 1875, and reëlected April, 1877. He was born in New Hampshire in 1827 and came to Chicago in 1850. He was a painter and a dealer in paint materials. His firm was first Heath & Hurd, and afterward Heath & Milligan. He was a man of good executive ability, public-spirited, taking an active part in municipal affairs. He died at Asheville, North Carolina, October 21, 1894.

Carter H. Harrison, the first, was the thirty-fifth, thirty-sixth, thirty-seventh and thirty-eighth mayor, having been elected successively in 1879, 1881, 1883 and 1885. He was born in Fayette County, Kentucky, February 25, 1825, and came to Chicago in 1855. He did not appear very much in public matters until 1871, when he was elected a member of the board of county commissioners. He soon became an active and influential member of the board and developed great popularity with the Democratic party, and was elected to Congress, where he managed to increase his popularity with his party and secure a stronger hold on the political organization. In 1879 he was first elected mayor of the city, and, as said before, was reëlected three times, continuing mayor for eight years. While he was severely criticised during this time for his leniency toward gamblers and other violators of the law, he was very successful in managing the business and financial interests of the city, and, although a strong partisan, he never permitted politics to interfere with the character of the school board, and husbanded the earnings of the waterworks with great care, managing this branch of the city's business successfully. In 1887 he was not a candidate for reëlection, but retired from the field. In 1893 he ran as an independent candidate and was elected, defeating both the Republican and regular Democratic tickets, thus becoming the forty-second mayor. He was mayor at the time of the World's Fair, and was given great credit for the very satisfactory manner in which he performed the duties of his office. In October of that year, just before the close of the World's Fair, he was assassinated at the door of his house by a half-crazy imbecile, who imagined that he had been slighted by the mayor in not receiving some political appointment. Upon the death of Mayor Harrison, the city council selected George B. Swift as acting mayor. A special election for mayor, however, was held in December. George B. Swift was the Republican candidate and John P. Hopkins the Democratic candidate. Hopkins was elected.

John A. Roche, the thirty-ninth mayor, was born in Utica, New York, August 12, 1844. He came to Chicago in 1869 as the representative of a manufacturer of machinery. While Mr. Roche was quite well known in business circles, still with the people his name was quite new when he was nominated in 1887. He was elected and made a very creditable administration. He

JOHN A. ROCHE.

made political mistakes, however, and though renominated in 1889 was defeated by DeWitt C. Cregier, who was at that time the Democratic candidate.

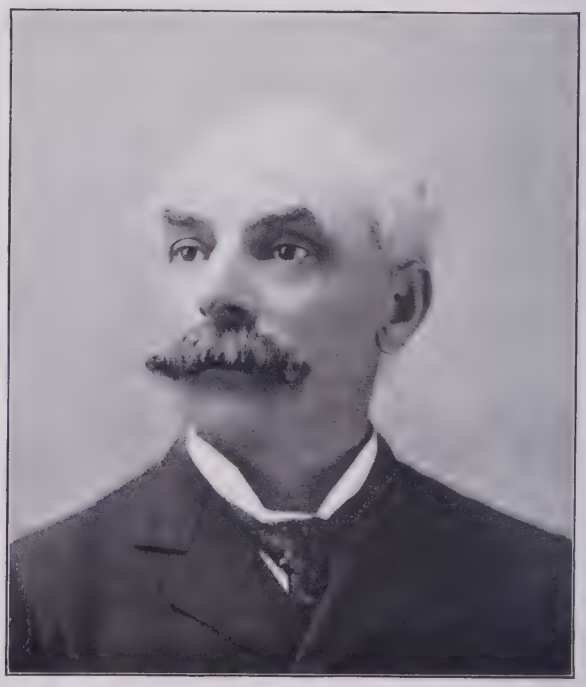
DeWitt C. Cregier was the fortieth mayor, elected in 1889. He was born in New York, June 1, 1829, and came to Chicago in 1853, where he lived until his death, which occurred November 9, 1898. He had been quite prominent in municipal affairs. He was for many years superintendent of the waterworks of the city and made a very efficient and satisfactory officer. Afterward he was commissioner of public works. He was a prominent Mason and had as many personal acquaintances as any man in the city. His administration, however, proved not only unsatisfactory to his own party, but especially so to the Republicans. He did not seem to have the firm hand or strong will of Mr. Harrison, and failed to keep the business of his office entirely under his own control. Though he was nominated by the Democratic convention for reëlection in 1891 he was defeated.

Hempstead Washburne, son of the Hon. Elihu Washburne, and the forty-first mayor of Chicago, was born in Galena, Illinois, November 12, 1852. He fitted for college, but went abroad and entered the University at Bonn, Germany, in the fall of 1871, and remained there two years, returning in 1873, and began the study of law, graduating at the Union College of Law in Chicago in 1875. He then entered actively into prac

tice. In 1885 he was elected city attorney of Chicago, and in 1887 reëlected to the same office. In 1891 he was nominated by the Republicans for the office of mayor. The administration of DeWitt C. Cregier, the Democratic mayor, had been displeasing to Democrats generally and to Carter H. Harrison, former mayor, especially, and upon Mr. Cregier's renomination Mr. Harrison announced himself as an independent candidate. This divided the Democratic vote and elected Mr. Washburne mayor. He was appointed one of the municipal civil service commissioners in 1897, but in 1898 resigned the position. He is still in active business in the city.

John P. Hopkins, the forty-third mayor of Chicago, was elected to that position in December, 1893, defeating George B. Swift, the Republican nominee, both being candidates for the unexpired term of Carter H. Harrison, who had been assassinated, as mentioned above. Mr. Hopkins was the youngest man that ever held the position of mayor of Chicago. He was born in Buffalo, New York, October 29, 1858, being just past his thirty-fifth year at the time of his election. His biographers say that he is a self-made man. His father and brothers being deceased, he had to start out not only to make a living for himself, but to take care of his mother and family. His first employment as a mere boy was working in a foundry. Afterward he worked in the grain elevators at Buffalo. In 1879 he came to Chicago, bringing his mother and sisters with him. For a time he worked in the Pullman works, and in 1883 became the paymaster of the Pullman interests, which position he filled until 1885. His administration of the office of mayor was much more satisfactory to the Democrats than to citizens generally.

George B. Swift, the forty-fourth mayor of Chicago and now president of the contracting firm of George B. Swift Company, was born at Cincinnati, Ohio, December 14, 1845. While he was an infant his parents removed to Galena, Illinois, whence the family came to Chicago, in 1862. He received his education in the old Skinner School, the West Chicago High School, and later at the Chicago University, from which institution he was graduated with credit. He then went into business, and in 1870 became vice-president of the Frazer Lubricator Company, which position he still holds. From 1876 he took an active part in local politics, serving several terms in the council and familiarizing himself with the various municipal problems. During the administration of Mayor Roche, from 1887 to 1889, he served as Commissioner of Public Works. In 1893 he was nominated for mayor by the Republican party, for the unexpired term of Carter H. Harrison, who had been assassinated, but was defeated by John P. Hopkins, the Democratic nominee, by a narrow margin. He ran again in 1895, defeating Frank Wenter by a large majority. When he assumed his executive duties he was thoroughly familiar with local conditions and the city's business affairs. He showed a capacity for municipal management and gave the city an excellent administration; he created the department system which has since proven a saving to tax-payers. He was popular as a mayor, and served a full term, but business interests prevented his accepting a second nomination. He has since devoted himself entirely to his extensive con-



GEORGE B. SWIFT.

tracting and building business. Mr. Swift was married in 1868 to Miss Lucy Brown, daughter of Joseph E. Brown, one of the pioneers of Chicago, who came here in 1835. They have seven children, four sons and three daughters. He belongs to the Masonic, Pythian, Royal Arcanum and Royal League orders, and is a member of the Methodist church.

Carter H. Harrison, the son of the former mayor of the city, was the forty-fifth, forty-sixth, forty-seventh and forty-eighth mayor of Chicago. He was born in this city April 23, 1860, and so far as records show is the only mayor of Chicago who was born here. He was graduated from the public schools and from St. Ignatius College in 1881. From there he went to Yale Law School, getting his degree in 1883. He made little effort to practice his profession, but entered business with his brother. His father purchased The Times in 1891, and his son took charge of the editorial management of the paper, assuming complete control when his father was killed at the close of the World's Fair.

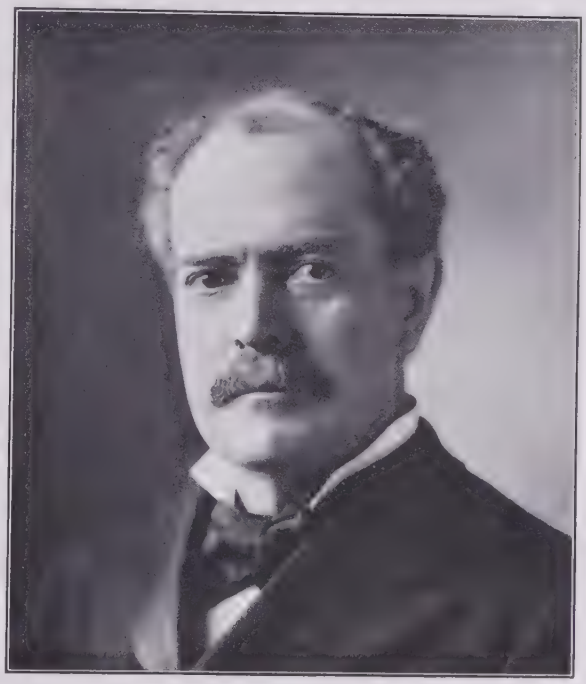
Shortly afterwards the paper was consolidated with the Herald. He was first elected mayor April 6, 1897, and re-elected in 1899, 1901 and 1903.

Edward F. Dunne, the forty-eighth and present mayor of Chicago, is in many ways the most remarkable chief executive the city has ever had. Resigning his place on the Circuit bench of Cook County to become mayor of the second city of the United States, he brought with him an experience and learning possessed by few, if any, of the other chief executives this municipality has had. His personality, his family life, his character as a citizen always have stamped him as a remarkable man. His campaign and election were characteristic. Opposed to him was a combination of newspapers and moneyed interests which would easily have swamped a less vigorous personality. The great traction issue was at stake. Mayor Dunne entered the fight when the opposition had lined up seemingly irresistible forces. His success and the defeat of John Maynard Harlan, the traction candidate, was in many ways the most remarkable political performance Chicago has ever witnessed. Judge Dunne in his campaign pledged himself to work out the idea of municipal ownership as applied to public utilities in Chicago and particularly to the public service corporations as typified by street car companies. The manner in which he has started to carry out his ideas fully justifies the faith that his friends and constituents have in his ability and integrity.

Edward Fitzsimons Dunne was born at Waterville, Connecticut, October 12, 1853. His parents, Patrick W. Dunne and Delia M. Dunne, came to New York from Ireland in 1849. Within a year after their son Edward was born they moved to Peoria, Illinois, and here the future mayor spent his youth and early manhood. His father prospered in business and held a number of important offices. He served as alderman several years and was also a member of the Illinois legislature.

The father's prosperity enabled him to send his son to Trinity College in Dublin to complete his education. The son's career at Trinity for three years was marked with success. He became the first honor man of his class and expected to be graduated with distinction at the close of another year. His father, however, suffered business reverses during the depression of the early 70's, and the son was forced to give up his work at Trinity. He returned to Peoria and entered his father's mill, continuing his studies, however, with the view of entering the legal profession. He came to Chicago in 1876 to continue his law studies and the next year was admitted to the bar.

In partnership with such distinguished lawyers as Judge Scates, formerly of the Supreme Court of Illinois, and Congressman Hynes, Mr. Dunne built up a large practice, to which he devoted his energies for fifteen years. He withdrew from practice in 1892, upon being elected to fill a vacancy on the Circuit Court bench. Here he soon began to make a record for judicial ability and fidelity, which, strengthening as it grew, secured his re-election in 1897 and again in 1903. His nomination for the latter election was indorsed by the bar association and the various good government organizations and newspapers, and was confirmed by a popular vote which fell but slightly short only of the highest—that which was cast at the same time for the venerable and revered Judge Murray F. Tuley.



EDWARD F. DUNNE.

Judge Dunne had meanwhile married with Elizabeth J. Kelly of Chicago, at Chicago in 1881. They have had thirteen children, of whom ten are still living. These range in years from seventeen to two.

In the course of his thirteen years' service on the bench, Judge Dunne decided many important cases, some of them involving clashes over partisan and class interests; but he never fell under suspicion of bias, and only a small percentage of his decisions were reversed. His judicial reputation, no less with the judiciary and at the bar than among the people, measured up to a high standard. Yet he always refused conformity to judicial conventionalities that tend to alienate the sympathies of judges from the common life and the common interests, and are therefore supposed to shield them from demoralizing influences. His insistence upon his

freedom as a citizen notwithstanding his judicial office, did not disturb his judicial balance. Throughout his career on the bench, he was a worthy example of the citizen-judge.

Judge Dunne entered the municipal ownership movement when it passed from the academic to the practical stage. He had been selected as a member of the committee of aldermen and citizens appointed by Mayor Harrison in 1902 to suggest plans for dealing with the traction question. In December, 1902, it recommended two bills for municipal ownership and operation, one for street cars and the other for gas, which were largely Dunne's work. The one relating to street cars came to be known in the City Council, to which it was presented for approval, as the "Finn bill." It was rejected by that body, and the "Jackson bill" was substituted for it for recommendation to the legislature. The Jackson bill, recommended by the Council in the interest of the traction companies, was displaced in the legislature by the "Mueller bill," which became a law and is now in force in Chicago. The solution of the traction question in accordance with the Mueller bill is the large work which Mayor Dunne hopes to accomplish during his term as chief executive of the city of Chicago.

GARFIELD PARK.

CHAPTER V.

CHICAGO IN WAR.

THE part taken by Chicago in the Civil war and the war with Spain deserves distinct recognition in any history of Chicago, however brief. It was wiped off the map by the war of 1812 and was too feeble to help much in the Black Hawk war, of which it was almost within cannon shot, and when the Mexican war came it was still too small to be taken account of. But by the spring of 1861 it was an important city, and by the spring of 1898 it was a very great city.

The first public meeting in Chicago, called out by secession, was held January 5, 1861, before the electoral colleges of the several states had met at their respective capitals to choose a president. The rebellion was rampant at Charleston. The people of Chicago, irrespective of party, proclaimed their loyalty to the flag at that time. When the first call for volunteers came and Governor Yates issued his proclamation April 15, 1861, announcing Illinois' quota, Chicago lost no time in responding. At noon on the 21st day of that month General Swift left Chicago with 595 men and four six-pound pieces of artillery, going directly to Cairo.

Three days before the first Chicago troops turned to the front a mass meeting was held in Chicago, at which a Union defense fund was started, which, before the close of the next day, reached $36,000. The banks of the city tendered Governor Yates a loan of $500,000 in advance of the assembling of the legislature. Military companies, which had been organized in time of peace, sometimes sneered at as mere dress parade affairs, promptly tendered their services. The most conspicuous of these organizations were the Chicago Zouaves, who, under the gallant Ellsworth, won a renown hardly less than that of the Rough Riders in Cuba, although the Roosevelt of the organization did not survive to receive political honors at the hand of a grateful people.

The first call for 75,000 volunteers for three months opened the way for six regiments from Illinois. Chicago had only about 110,000 inhabitants then, but had the spirit to gladly supply the entire quota, if allowed to do so. The six Illinois regiments were numbered seven to twelve. The state had sent six regiments to the Mexican war, and the enumeration was a continuance. Chicago contributed two companies to the Twelfth Illinois Volunteer Infantry; the Zouaves and Swift's men were later incorporated in the Nineteenth regiment and mustered into the three years' service May 4, 1861. The Twenty-third was a Chicago regiment, led by the brave Colonel James A. Mulligan. That was the first Chicago regiment to see service on the battlefield. It was the Irish regiment of Chicago. Through it Chicago received its baptism of bloodshed in the holy cause of the Union at Lexington, Missouri, September 18, 1861. The German regiment was the Twenty-fourth, commanded by Colonel Hecker, who had fought for liberty in his native country. The Thirty-seventh was organized by a well-known and highly-honored Chicagoan, Julius White. The Thirty-ninth, known as the Yates' Phalanx was mustered in during the summer. A young Chicago lawyer, Thomas O. Osborne was elected colonel, but modestly chose to be major. He worked his way up to general. The Forty-second was organized in Chicago. It entered the service in September of the first year of the war, William A. Webb being colonel. The Chicago Legion, as it was called, the Fifty-first regiment, entered the service December 4, Colonel Gilbert W. Cumming commanding. The Fifty-seventh, the last of the Illinois regiments of the first year of the war, who were made up

in whole or in part of Chicago troops, was mustered in December 26, Silas D. Baldwin, colonel.

Hardly had 1862 opened before the "McClellan Brigade," as it was popularly called, came into military existence as the Fifty-eighth regiment. Colonel William F. Lynch commanded it. In May the Sixty-fifth, or Scotch regiment, was mustered in, Daniel Cameron at its head. In August the famous Board of Trade regiment, the Seventy-second, moved into battle line, Hundred and Thirteenth, "Third Board of Trade Regiment," commanded by Colonel George B. Hoge, and the One Hundred and Twenty-seventh, under Colonel John Van Arnam. All these were infantry regiments, and the latter won the distinction of having marched 3,000 miles and been under fire in one hundred engagements. Every one of these regiments rendered gallant service on the field.

Chicago was well represented in three calvalry regi-

AUDITORIUM BUILDING.

Colonel F. A. Staring in command and Joseph Stockton next in rank. The Eighty-second was called the "Second Hecker Regiment," being German in its make-up, and at first under the command of Colonel Hecker, who was succeeded by Colonel E. S. Soloman. This regiment entered the service early in the fall of 1862. So did the Eighty-eighth, or "Second Board of Trade Regiment," commanded by Colonel Francis T. Sherman. Also the Eighty-ninth, or "Railroad Regiment," Colonel Hotchkiss; the Ninetieth, the "First Legion," under Colonel Timothy O'Meara; the One ments, which were early in the field, the Fourth, Eighth, Ninth, Twelfth, Thirteenth, Sixteenth and Seventeenth. They were mainly recruited from Northern Illinois, outside of Chicago, but this city was represented in them all, but more especially in the Eighth, which had for its major W. H. Medill of Chicago. The Board of Trade Battery was mustered in August 1, 1862, and the Chicago Mercantile Battery four weeks later. No less than forty-six commissioned officers, who were either killed in battle or died soon after of wounds, entered the service from Chicago. These are dry facts, but

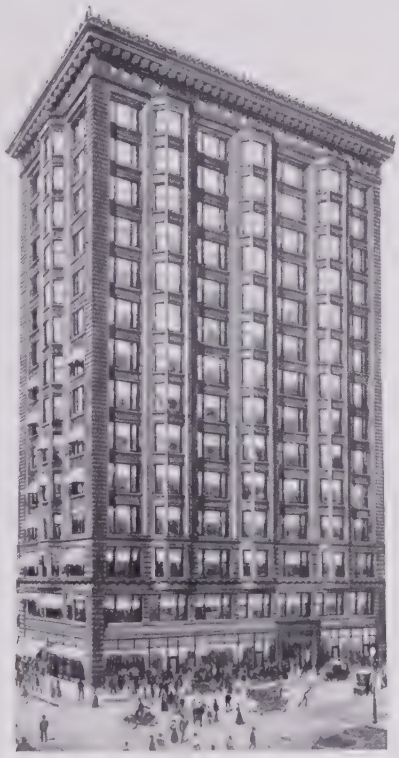
to go into further particulars without invidious discrimination would take too much space. For a city of only little more than 100,000 inhabitants it is a proud record to have been represented in so many regiments and batteries.

But the most prominent feature of the military record of Chicago during the war of the rebellion was the Camp Douglas affair. That camp was designed to be a rendezvous for Illinois volunteers, but it was actually used as a military prison. Fort Donelson fell in February, 1862, and Island No. 10 was captured about the same time. Between 8,000 and 9,000 prisoners, who fell into our hands in consequence of those two victories, were sent here to Camp Douglas. Many of these prisoners died. The season of the year was unfavorable. Southern men were not accustomed to the rigor of the winter on the shore of Lake Michigan. Many died of pneumonia. Chicago raised a generous fund for providing the prisoners with the comforts required, and our physicians gave them medical care. But many died. Still later came smallpox. Out of 12,000 prisoners, 1,150 died.

But the feature which made it specially famous was the great conspiracy that was concocted in 1864. The funds for it and the details of it were attributed to Jacob Thompson, then in Canada, but formerly Secretary of the Navy under Buchanan. Knights of the Golden Circle were in the plot. The conspiracy had for its diabolical object not simply the delivery of the prisoners, but the burning of the town. Buckner T. Morris, the second mayor of Chicago, was arrested on the charge of being one of the conspirators, but he was acquitted. The plot was discovered only just in time to save the city. Colonel B. J. Sweet, the commander of the camp, has received a great deal of credit for saving the city, but not as much as he deserves. One of the parks should perpetuate the glorious rescue in fitting bronze, Colonel Sweet being the central figure. Richmond fell only a few months after the great deliverance of Chicago.

In the Civil war, as has been shown, Chicago boys, whether infantry or cavalry, were scattered through regiments largely rural, but in the Spanish war regiments were made up largely on geographical lines. The strictly Chicago regiments of infantry were the First, led by Col. Henry L. Turner; the Second, commanded by Colonel George M. Moulton; the Fifth, Colonel Culver's regiment; the Seventh, Colonel Marcus Kavanaugh. The Eighth (colored) had four companies from Chicago and four from the rest of the state. Its gallant colonel, John R. Marshall, was from Chicago. All officers, from colonel down, were colored, and both the regiment as a whole and every officer made a good record. It was the first colored regiment in the country to be officered by men of the same race, and a great deal of interest was felt in the result. It was so satisfactory as to be highly creditable to all concerned.

Chicago was well represented in the famous Rough Riders, and Companies E and F of the Second United States Volunteer Engineers were supplied by Chicago, and through them Chicago should have the honor of being the first to land in the province of Havana. Colonel Edward C. Young was commissioned by Governor Tanner to raise a regiment of cavalry, and of it



CHICAGO SAVINGS BANK.

Companies A, C, E, F, H, I and M were recruited in Chicago. Illinois took an honorable part in the naval battles of the war through the naval reserves, largely a Chicago orgaization. These "jackies" did not ask to be kept together, but patriotically consented to be distributed and placed where they could do the most good.

These meager facts give little idea of the heroic part taken by Chicago either in the Civil war or the later war with Spain. It would trench too much the limited space of this municipal history to recount incidents in detail, however glorious. For such details, especially of the Civil war, the reader is referred to Andreas' "Awakening of the War Spirit in Chicago."

CHAPTER VI.

CHICAGO'S GREAT FIRE DISASTERS.

CHICAGO has had two great disasters that stand out above all other misfortunes that overtook the city during its first century. These were the great fire of 1871, which burned over 2,124 acres in the very heart of the city, and the Iroquois theater fire on December 30, 1903, which wiped out 575 lives.

The fire of 1871 was the greatest property loss in the history of modern times, and left 100,000, or a third of the population of the city, homeless. The summer of 1871 had been particularly hot and dry, this weather continuing till late in the fall. Very little rain had fallen for some weeks and everything that was exposed to the air and would burn was as dry as tinder. Much of the early building construction in the city was of frame, and even the stone and brick buildings were of an inflammable character. There were in reality two fires. The fire of October 7 broke out near the corner of Clinton and Van Buren streets, and all the territory between that and the river and Adams street was burned over. That in itself was a great fire and would have been considered a very disastrous one but for the overshadowing greatness of the one that began on Sunday night, October 9, on De Koven street, on the West Side, a little east of Jefferson street. For two days and nights Chicago was a sea of flames and then a blackened desert. Everything seemed favorable for the destruction of the city. In addition to the tinder dried condition of all woodwork, a strong southwest wind prevailed, and as the fire increased the wind seemed to increase with it. Whole blocks of buildings were carried away, as if they had melted in the flames. The number of acres burned over by the fire of Saturday night was twenty-seven, but the great fire of October 9 burned over 194 acres on the West Side, 460 acres on the South Side, and 1,470 acres on the North Side. Over 3,650 buildings were burned on the South Side and 13,300 buildings on the North Side. On the North Side, by something like a miracle, a large frame building, the residence of Mahlon B. Ogden, standing in the center of a block, was saved from the flames.

At the time of the fire the city comprised an area of 11,520 acres. The population of the city was something over 300,000. Fully 100,000 of these were left houseless and homeless, many of them penniless. The pecuniary damage by these fires is estimated at $290,000,000. On the property thus destroyed there was $100,000,000 of insurance, on which $45,000,000 were realized. Fifty-six insurance companies were ruined.

The marvelous extent of the disaster and the ruin wrought was published far and wide. All the world became familiar with it within forty-eight hours. The benevolence and philanthropy of the world was stirred as it seldom has been and relief came pouring in from every quarter—money, clothing and provisions. A more prompt and noble response to distress has perhaps never been known. Over $4,000,000 was contributed in money for immediate relief, almost all nations, from England to Japan, contributing a portion, but, of course, the great mass of the relief funds came from American citizens. This wonderful response of the people of the world aroused the Chicago people to immediate action, and they organized not only for the purpose of properly distributing the great relief fund which came to them, but for the purpose of rebuilding the city. The prompt action of the solvent and energetic business men of the city soon restored confidence, not only to their fellow citizens, but to the people abroad, and capital was offered from all financial centers for the purpose of rebuilding Chicago. No city ever presented a busier scene than Chicago did for the next eighteen months.

Within one year from the time of the fire it is said that more than one-half of the 80,000 feet frontage which had been burned in the south division was rebuilt with buildings more substantial and better than before. It is estimated that over $30,000,000 within that time was put into rebuilding the city, and it is quite probable that at least $50,000,000 were spent in rebuilding within two years from the time of the fire. The rapidity with which the rebuilding was accomplished and the great influx of population on account of the demand for labor tended to keep Chicago before the whole country all the time. It was hardly less talked about in social circles or written about in the newspapers during that time than it had been during the excitement of the fire itself. What was a great disaster to individual citizens, and at the time seemed to be so to the city itself, turned out eventually as the most efficient promoter of Chicago's greatness.

Taken as a whole, the fire was the most wonderful advertisement that ever any city had, and the prompt action and energy shown by the people in rebuilding the city so suddenly destroyed turned it into a most favorable advertisement, and Chicago became a synonym for energy, determination and business sagacity. No internal city in any nation is so well known among other nations to-day as Chicago, and in large part it owes this general information in regard to itself to the great fire and its succeeding resurrection from its ashes. The great fire in 1871 and the World's Columbian Exposition in 1893 each marks an epoch in the progress and fame of the city.

The Iroquois theater fire was the most disastrous catastrophe in the number of lives lost in the history of Chicago. On the afternoon of Wednesday, December 30, 1903, during a holiday matinee performance the scenery caught fire and the flames bursting through the flimsy asbestos fire curtain swept through the auditorium of the theater, causing the death of 575 men, women and children. There were 2,300 people in the audience when the fire broke out, and a third of them were either killed or injured.

NATATORIUM, .DOUGLASS PARK.

"Mr. Blue Beard" was the attraction and the theater had just been completed a few weeks and was pronounced the finest and most modern and fireproof structure of the kind in the United States. It had been built at a cost of approximately $1,000,000, and had been inspected and approved by the building department as fully meeting all the requirements of the city ordinances. Investigation after the disaster showed that the construction had been faulty in many particulars, and that no provision had been made for the speedy opening of the exits in case of a panic.

Of the 575 victims, most of them were women and

children. The greatest loss of life occurred at the exits of the main balcony. Here over three hundred were found piled in an indescribable mass of torn and bleeding limbs and bodies. In the frantic rush for safety they had become piled and jammed in the entrance, and, overcome by the wave of flame and smoke sweeping through the auditorium from the stage, had been burned and suffocated to death. Every ambulance and patrol wagon in the city was called into use and the neighboring restaurants and stores were turned into temporary morgues and hospitals. Heroic efforts were made to resuscitate those who had not been burned to death, and in many cases the treatment was successful, materially reducing the total number of deaths. For days the undertakers' morgues were filled with bodies awaiting identification. Friends and relatives of missing persons searched these places for weeks looking for missing persons. All were identified finally.

Every theater in the city was ordered closed the day after the fire, and it was a month before any of them opened again. Several of them did not open for two or three months, and in some instances they were entirely remodeled. The Iroquois did not open for nearly a year, and then under a new name. The memory of the terrible loss of life after nearly two years still clings to the place and it has never been popular since. Efforts were made at the time of the fire to have it turned into a memorial hospital, but these failed.

There was a determined demand for the prosecution of the managers and officials responsible for the conditions in the theater which made such a calamity possible. Will J. Davis, Harry J. Powers and managers of the Iroquois, and George Williams, building commissioner, were arrested the day following the fire on warrants sworn out by the father of one family that had been wiped out by the holocaust. These prosecutions were not pressed. An exhaustive investigation was made by the coroner and a special jury impaneled for the purpose. In its verdict the jury held Mayor Harrison, Will J. Davis, Commissioner Williams, Edward Loughlin, the building inspector who passed the theater, William H. Musham, fire chief, William Sallers, city fireman stationed at the theater, William McMullen, who operated the spot light which started the fire, and James E. Cummings, stage superintendent of the Iroquois stage, to the grand jury. Mayor Harrison was freed from custody the next day on habeas corpus proceedings.

On February 20 following the special grand jury returned indictments against Manager Davis, Thomas Noonan, treasurer of the theater, and Cummings, the stage superintendent, for manslaughter and against Commissioner Williams and Inspector Loughlin for neglect of duty. "No bills" were voted in the cases against Mayor Harrison, Chief Musham, Sallers and McMullen. No convictions have resulted from the indictments and the chances are that no one will ever be legally held responsible for the horror that cost 575 lives.

As a result of the agitation against firetrap theaters following the holocaust, conditions in all the public places of amusement in Chicago and cities all over the country have been improved. Shocked by the terrible conditions revealed immediately after the fire the mayor called a special sesson of the council. A committee of investigation was appointed and a new theater ordinance drawn up. Under the stress of feeling at the time it was made most drastic, and while it has not been rigidly enforced, its provisions have been complied with to such an extent that every playhouse and place of gathering has been made more safe. In general terms the new law requires that theaters must be provided with steel curtains which are lowered at the end of every act; the stage must be of fireproof construction, and be provided with flues and vents in the roof and automatic sprinklers; aisles and exits must be increased and the seating capacity reduced; no one is allowed to stand in the aisles and all exits must be shown on a diagram of the theater on the program; four sides of the theater must be detached or provided with fireproof enclosed passages; fire apparatus and fire-alarm systems must be installed and two members of the fire department stationed in each theater.

A flood of damage suits have been filed against Klaw & Erlanger, the owners of the Iroquois, aggregating into the millions. None of these has been pushed to a successful conclusion up to this time (1905).

CHAPTER VII.

THE COLUMBIAN EXPOSITION.

CHICAGO is the county seat of one of the best agricultural counties of Illinois, but has never had a county fair. That pride and joy of the average farmer's heart was denied the tillers of the rich soil of Cook County. Once the state fair was held in Chicago, but it was not a success. For several years an Interstate Exposition, as it was called, was held on the Lake Front, but it was not particularly creditable. At least, it made a poor showing as compared with the somewhat analogous exposition given by St. Louis. It was only natural that when this city entered the list as a competitor for the great Columbian Exposition, in honor of the fourth centennial of the discovery of America, there should be a strong opposition. The selection was to be made by Congress, and New York insisted that it was entitled to it, as the great metropolis of the new world. The decision in favor of Chicago was made in April, 1890. The fair itself was opened three years later.

By the term of the act of Congress the "World's Columbian Exposition" was to be "an exhibition of arts, industries, manufactures and products of the soil, mines and sea." The sum of money to be guaranteed by Chicago under the act was $10,000,000. One-half of this amount was raised by subscription. The other half was raised by an issue of city bonds. There was a great obstacle in the way of a bond issue. The constitution of the state had to be amended before the city could incur the indebtedness, and the initiative had to be taken by the General Assembly, in special session, called for that purpose by the governor, Joseph Fifer. To remove these obstacles was quite as formidable a task as to raise the $5,000,000 by subscription. In August of that same year the special session was held, and the amendment was ratified at the state election of that November.

Another perplexing problem was, where should the fair be held? In looking back upon the exposition it is a matter of surprise that there should have been the slightest hesitation on the subject. The site selected was ideal. If it had been made for that purpose it could not have been improved upon. That portion of Jackson Park facing on the lake afforded every advantage. But for a long time it seemed to many that the best place would be the lake front, between Randolph and Twelfth streets, making such addition by filling in as might be necessary. The decision of the question was not made until nearly one year after the act of Congress had been passed. From that time on the work of preparation was prosecuted with astonishing vigor, and on a very large scale. The grounds were laid out and beautified at great expense, and no less than fourteen exposition buildings proper were erected, each in itself a grand example of architecture. Some of them were marvels of beauty, and each was admirably adapted to its specific purpose. The Manufactures and Liberal Arts building, 1,687x787 feet, was the most gigantic of them all, and the Administration building the most artistic, but each was in its way most admirable. If built of the whitest marble, instead of perishable "staff," they would have presented no more entrancing effect. "The White City," as it was called, was a sight well worth a journey around the world to see, even if one saw only the buildings and grounds. No permanent city could vie with it as a triumph of architecture.

Besides the buildings erected by the exposition company, and their annexes, the government of the United States had a magnificent structure for its own exhibits. So, too, did seventeen foreign countries, thirty-eight states and three territories. Many exhibitors and con-

cessionists put up structures of their own. Many foreign nations and colonies, which had separate buildings of their own, contributed to the exhibits. Foreign governments expended, it is estimated, $6,000,000 for the cost of their exhibits. No doubt private exhibitors from abroad expended more than that amount.

The exposition opened May 1, 1893, and closed October 31. During those six months the total attendance, as shown by the turnstile registries, was 27,539-521. The actual paid admissions were 21,478,218. Of course many persons made many visits. It is impossible to estimate how many different persons saw the exposition, but there must have been several millions. The greatest number of any one day was on October 9, the twenty-second anniversary of the great fire. That was called Chicago day, and it seemed as if the whole city swarmed into the White City. The turnstile records of that one day showed 716,881 visitors.

The condensed balance sheet of the auditor showed a grand total of funds of $28,151,168.75. It is a low estimate to place the cost of the fair, including public appropriations and expenditures of exhibitors, at $50,000,000. The cost to visitors cannot be computed. But no one can intelligently doubt that the general benefits were incomparably greater than the actual cost. Many persons lost money in business ventures which proved unprofitable, and much disappointment was experienced, but the general public derived enormous benefits from the exposition.

In the management of the exposition many persons deserve very great credit, but a few names are entitled to distinct recognition and grateful remembrance. No one individual did more to make the exposition a brilliant success than Mrs. Bertha Honore Palmer, president of the Board of Lady Managers. She had never been tried in any public duty, but she proved to have remarkable executive ability and a broad, clear and far-reaching judgment. Lyman J. Gage, Ferdinand W. Peck, Harlow N. Higinbotham, Thomas P. Bryan, George R. Davis and T. W. Palmer each gave much time to the enterprise and did much in his own way to make the exposition a great success.

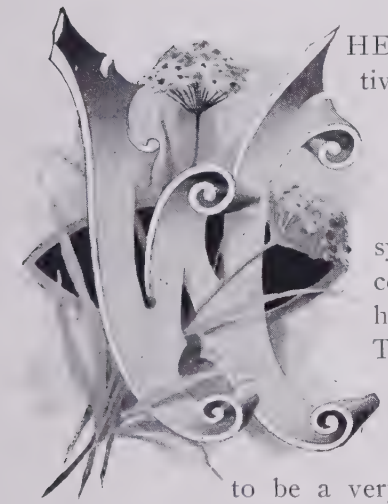
One of the more notable features of the exposition was the series of "congresses" gotten up in connection with the exposition. Charles C. Bonney deserves to be called the author and finisher of this auxiliary part of the fair. He and the late Professor Swing each suggested this department, but neither knew anything of the other's plan. Professor Swing was an idealist and was content to merely suggest the plan, but Mr. Bonney took a practical view of the matter, and the managers gave him every facility for carrying out his project. The most notable of these congresses was the Parliament of Religion. The head of the committee having this in charge was the Rev. Dr. John Henry Barrows, then pastor of the First Presbyterian Church of Chicago, now president of Oberlin College. Eminent religionists from all over the world were in attendance and the public interest in the poceedings was widespread and intense. The cause of religious unity and fellowship was materially promoted.

As for the exposition as a whole ,it was conceded to be the grandest and most successful world's fair ever held. It did much to establish the reputation of Chicago as one of the greatest cities of the world. From that time on it has been wholly free from the belittlement of a provincial reputation. That celebration of the fourth centennial of the discovery of the new world was a mere episode in the history of the city, but it will ever stand as one of the more memorable landmarks of Chicago's great municipal career.

This exposition occasioned some financial disappointment to individuals, but to the city as a whole it was of incalculably great benefit. It gave a wonderful stimulus to population and contributed powerfully to the general development of Chicago as a center of trade and industry.

CHAPTER VIII.

THE ILLINOIS AND MICHIGAN CANAL.



HEN the genius and executive ability of DeWitt Clinton put New York City in all-water communication with the Great Lakes and the great West, he started a system of East and West commerce which was of the highest national importance. The early coming of the then undreamed of railroad cut short the career of the canals, but water continues to be a very great factor in overland transportation, contradictory as the statement may seem. What the Erie was to New York in the early days of the century, the Illinois and Michigan Canal was to Chicago in its municipal youth.

It was a citizen of New York who first, after Joliet himself, recognized the importance to commerce of the portage of Chicago. In 1810 a member of Congress from that state, Hon. Peter B. Porter, drew the attention of Congress to the importance of connecting the Mississippi river and Lake Michigan by building a canal to supply the missing link in the chain of waterways which was to extend from New Orleans to New York. But the United States government had other matters more pressing to look after. The second war with England was near at hand. Four years later, however, President Madison called the attention of Congress to the subject, and the government organ of the day, the Niles Register, caught a glimpse of the great possibilities latent in the President's suggestion. "By the Illinois river," it said, "it is probable that Buffalo in New York may be united to New Orleans by inland navigation through Lakes Erie, Huron and Michigan an down that river to the Mississippi." It was precisely that which the Illinois and Michigan Canal did do. And the ecstatic exclamation of the Register has also been justified, "What a route! How stupendous the idea! How dwindles the importance of the artificial canals of Europe compared to this water communication! If it should ever take place—and it is said the effort can easily be made—the territory of Illinois will become the seat of an immense commerce and a market for the commodities of all regions." That could hardly have been a truer prophecy had it been a veritable case of history read backward.

It was in 1816 that the first practical step was taken. One of the necessary preliminaries was to get rid of the Indians. A people stolidly set against accepting civilization must be removed from the path of progress. A strip of land twenty miles wide, extending from Ottawa to Chicago belonged to the Pottawatomies. In August, 1816, they relinquished their title to that slip. Then the government set about exploring and getting ready to carry out the Porter-Madison plan, or the DeWitt Clinton plan applied to the West. The first thing was for a United States civil engineer, Major S. H. Long, to make a trip from Fort Clark, or Kaskaskia, to Chicago. It was a long journey by boat, all the way against the current. When he reached the Chicago river he found it "discharged itself into the lake over a bar of sand and gravel, in a rippling stream ten or fifteen yards wide and only a few inches deep." The Calumet was still worse, for the sand-bar down there was a complete blockade. His report struck no responsive chord in Congress. Eight years later, when the state had been in the Union four years, Congress did pass an act granting the state authority to cut a canal through the public lands, donating ninety feet on either side and appropriating $10,000 for the survey. In consideration of this permit and the appropriation of land and money the state agreed to allow all articles belonging to the

HUMBOLDT PARK.

United States, or to any person in its employ, to pass toll free forever. The legislature of Illinois lost no time in getting down to business. It was conceived at that time that Indiana might join and open up lake communication by way of the Wabash, and Ohio by way of the Maumee, but, as a matter of fact, each of the three propositions was independent of both of the others. It required a great deal of surveying and expert calculation to reach a definite plan. The state act incorporating the Illinois and Michigan Canal Company was passed early in 1825, with a capital stock of $1,000,000. This act was amended in the next year, in the hope of facilitating operations. But the necessary capital could not be raised. In 1827 Congress was induced to grant a liberal land subsidy, namely $284,000.

Fortunately there was no Credit Mobilier to absorb this subsidy. The state itself took it. The acts of 1825 and 1826 were virtually dead and the corporations which they contemplated existed only on paper. In 1828 the legislature started the enterprise on a feasible basis. Still further legislation followed in 1829. The most important preliminary work of the first board of canal commissioners was to lay out towns at each end of the canal that was to be—Ottawa and Chicago. Practically nothing was done except to lay out these two terminal towns until 1836, when more legislation was had. In the meanwhile obstacles of the most serious nature were encountered, and it looked as if the canal, then so long talked about, never would be built. The first spadeful of earth was thrown out on the 4th of July, 1836. Never was Independence Day more joyfully celebrated than on that ever-glorious Fourth by the people of Chicago. Everybody turned out and went down to Bridgeport to witness the inauguration of the enterprise. The honor of wielding the spade on that occasion fell to the lot of Canal Commissioner Archer, whose name lives in the diagonal avenue, or "road," as then called, which leads from State street to Bridgeport.

But the beginning was far from the end. More years of weary waiting and baffling toil were destined to roll by before the canal became an accomplished fact. The estimates of cost had been wild guesses, at least they bore no relation to actual cost. It was not before the crash of 1837 came and put clogs on every wheel of internal improvements and killed forever many of the projects. The state tottered on the brink of bankruptcy. The debt incurred in building this canal was the heaviest burden of all. The bad kept getting worse all the time, and in 1842 came a collapse of state finances. There seemed to be nothing left but to use the big ditch as a grave for state honor. More than a hundred contractors who were working along the line when the state credit was exhausted had to suspend. The total cost up to that time, as finally ascertained, was

$5,139,492.03. This was too much money to be thrown away. Despite the old adage warning against throwing good money after bad, the idea of giving up entirely was not entertained. A great many bonds had been sold, and the bondholders could not afford to let the expenditure go to waste. It was estimated that $1,000,000 more would finish the work, making, all told, nearly ten times the original estimate. It took a vast deal of negotiation to get the work started up. The Barings of London thought well enough of the proposed bonds to entertain a proposition, provided a satisfactory report upon the enterprise was made. Who in this country could be found to make the investigation whose report would be accepted? Captain W. H. Swift, a United States engineer, was one, and Senator John Davis of Massachusetts, another. Mr. Davis was known in his day as "Honest John." He was at one time the modest colleague of the "Godlike Daniel" Webster. After prodigious labor bonds were placed on the institutional plan, not only English, but French, capital helping on the enterprise. Obstacle after obstacle was encountered, but at last the canal was actually opened, and the first boat arrived in Chicago from Lockport, April 10, 1848. Of all the great internal improvements in this country none had so hard a struggle against such desperate odds as the Illinois and Michigan Canal.

When projected it was absolutely indispensable to the growth of Chicago to the dimensions of a great city, and it has certainly proved of very great advantage, but by the time it was finished it was no longer indispensable. The morning star of railways had appeared and the new day of transportation by rail was dawning full upon the land. By that time it was plain that however much Chicago might be benefited by canal boats its great dependence, aside from the lakes themselves, was to be upon the railroads. As will be seen in another chapter, the canal, by involving the state in debt, which was in danger of repudiation, was the indirect cause of the great railway extending its entire length.

In this connection it may be remarked that about the time the completion of the canal became a foregone conclusion, Wisconsin, then coming into the Union as a state, laid claim to a slip of northern Illinois, which, if allowed, would have brought Chicago into Wisconsin. The claim was not without a shadow of justice. But an insuperable practical objection was found in the fact that to allow it would involve the complication dividing the ownership of the Illinois and Michigan Canal, the great enterprise of Illinois, with

GARFIELD PARK.

Wisconsin. Thus it is that Illinois owes a great debt to the canal.

It is not necessary to the purposes of this history to pursue this subject much further. Its large part in developing the city may be said to have passed before it went into the carrying trade. The main canal, from Bridgeport to La Salle, is ninety-six miles long, and the river route from Bridgeport to the Chicago harbor is four miles. Illinois, through its great metropolis, has indeed become, as the Niles Register forecasted, "the seat of an immense commerce and a market for the commodities of all regions," and in a fundamental way the "stupendous idea" of Peter B. Porter, a second Joliet, contributed largely to this result. But the canal itself came very, very near accomplishing its supreme purpose before it became an accomplished fact. In a sense its builders builded better than they knew; in another, their costly edifice proved largely an air castle. During all the long years of construction it served to inspire confidence in Chicago's future, but before it came into place as an agency of transportation the shadows of evening were gathering about the day of canals and Chicago was entering upon its higher destiny of being the great focal center of railway traffic.

MASONIC TEMPLE.

CHAPTER IX.

CHICAGO'S WATER SYSTEM.

CHICAGO'S water system has for its supply the inexhaustible stores of Lake Michigan. From it are pumped annually 150,000,000,000 gallons of water to supply the needs of the city's 2,000,000 inhabitants. In the use of water, Chicago believes there can be no waste, and in no city in the world is there such a prodigality practiced, each person having more than 200 gallons a day for use.

The problem of utilizing this magnificent water supply and keeping it unpolluted has been admirably solved by Chicago. Thirty miles of tunnels take the supply from miles out in the lake to the ten pumping stations in various parts of the city. These stations have a capacity of 529,500,000 gallons a day.

Like all the other public improvements of the city, Chicago's water system is typical of its unparalleled growth. A century ago the daily water supply for Fort Dearborn and the few settlers around the stockade was taken in buckets from the river and lake. To-day every home has within it an inexhaustible supply, furnished at a cost lower than that of any large city in the world.

The millions that have been invested in its waterworks have brought a goodly return and to-day the city makes millions from this source annually. With the surplus from the water fund, it has built sewers and other public improvements, though the warrant for this diversion has been seriously questioned. Supplementary to the water system is the drainage canal which has cost the city already over $42,500,000, not including the millions diverted from the water fund for the system of intercepting sewers. The wonder of this growth is best realized from a review of its history and development.

The first waterworks Chicago had, consisted of a single well, dug in November, 1834, in Kinzie's addition, at an expense of $95. This proving inadequate, the water cart appeared. This consisted of a hogshead mounted on two wheels and drawn by a horse, which was backed into the lake, filled with water by a bucket, and then hauled around the village. The water sold for ten and fifteen cents a barrel, and the number of water carts constantly increased. They did not go entirely out of use for twenty years.

In 1836 the Chicago Hydraulic Company was incorporated with a capital of $250,000 to supply the city with water by pumping and piping. But, owing to the panic of 1837, the work was not begun until 1840. The pumping house, which was located at the foot of Lake street, and the appliances were completed in the spring of 1842, at a cost of $14,000. There was an intake constructed 700 feet out in the lake, and it was connected by a six-inch wooden supply pipe with a well fifteen feet deep in the pumping house.

It was not until 1841 that the company undertook to supply water for the fire department, and in 1848 not over one-fifth of the city was reached by the supply pipes. The water carts were still necessary, and poor people used the river water. From 1846 there were complaints that the hydrant water was impure and frequently filled with small fish.

In February, 1851, the Chicago City Hydraulic Company was incorporated to succeed the Chicago Hydraulic Company. The construction of the waterworks, which was located at the foot of Chicago avenue, was begun in 1852, and the buildings were completed the next year. The engine house was on the beach, and had a square brick tower 136 feet high, in which were both the standpipe for the water and the smokestack. The water was pumped into three reservoirs, one on each side of the city. Water was first pumped in December, 1853. In 1855, forty-one miles of pipe had been laid, and the total cost of the works had amounted to $496,849. The number of buildings supplied with

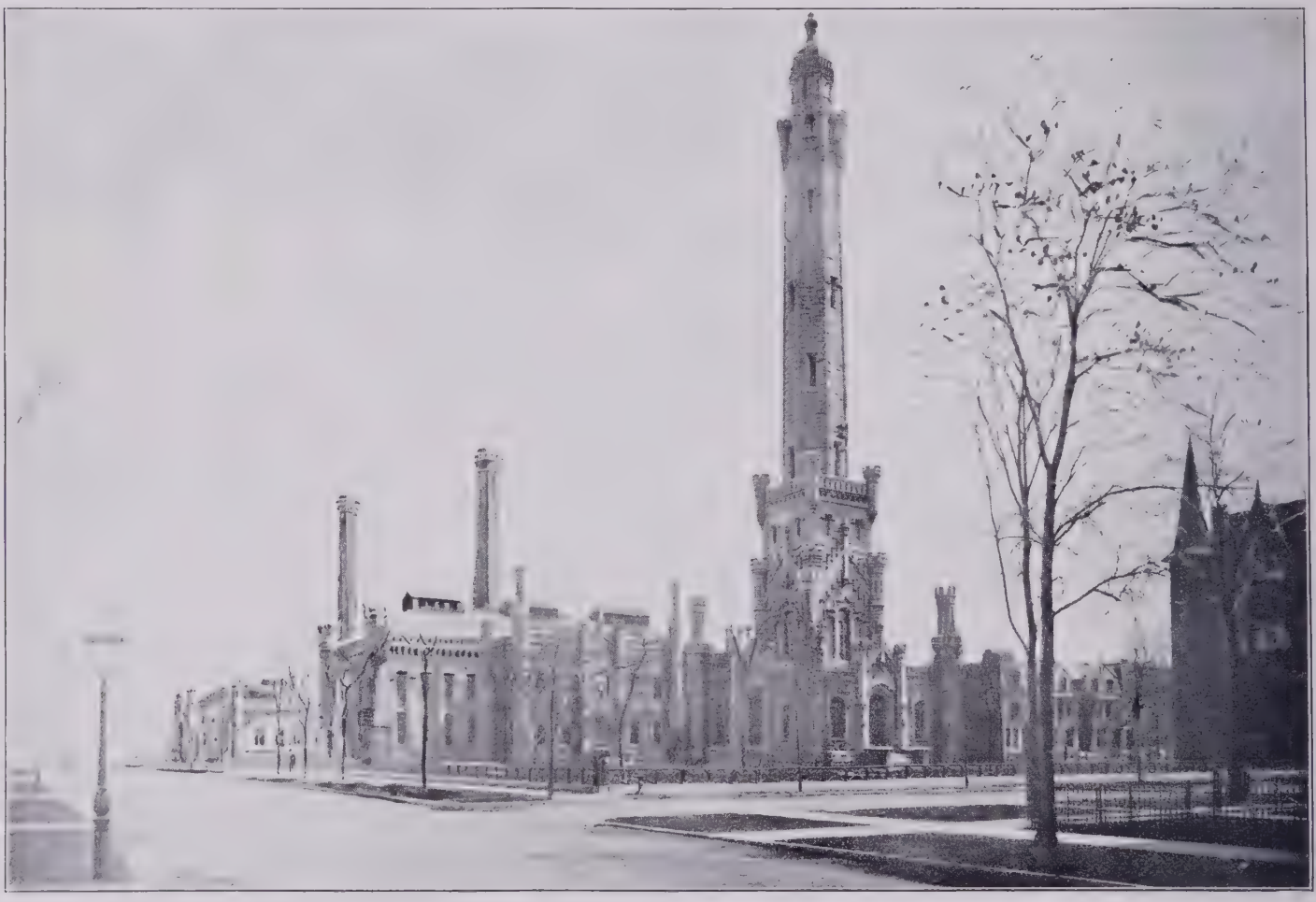
water was 7,053. The Board of Public Works was established and took charge of the works, May 6, 1861.

Although in 1858 the pumping works supplied 3,000,000 gallons of water daily, and the amount was increasing, it became evident that a much greater supply would be needed. There were also constant complaints of the impurity of the water furnished. In 1862, therefore, City Engineer C. E. Chesbrough began to agitate for a water tunnel under the lake to a point where good water could be secured. In September, 1863, the city government adopted his plan, and let the contract for the construction to Doll & Gowan of Harrisburg, Pennsylvania, who agreed to complete it by November 1, 1865, for $315,139, and broke ground March 17, 1864.

The water tunnel was to be five feet in diameter, and to run in a straight line at right angles to the shore, at the pumping station, two miles out into the lake, and to be sunk twenty-six feet below the level of the lake. At each end there was to be a well nine feet in diameter, the one out in the lake being an intake, and the one on shore being a pumping well. The work was prosecuted from both ends of the tunnel at once. The final blow was struck December 6, 1866, instead of November 1, 1865, and the cost was $464,866, instead of $315,139.

The completion of the tunnel was celebrated as a great event. The mayor and the city officials traveled through the tunnel in mule carts to a point one and a half miles from the shore, where the workmen met, and where a memorial tablet was inserted in the wall, after considerable speech-making, Mayor Rice pronouncing the tunnel "the wonder of America and the world."

At the same time that the construction of the tunnel was decided on steps were taken for the construction of the pumping station as it now exists at the foot of Chicago avenue. The new building was erected piecemeal on the same site as the old one in such a way as not to interfere with the old water supply until the new one was ready. The water was let into the tunnel March 25, 1867, and on the same day was laid the cornerstone of the water tower, 100 feet west of the pump house. This tower is 130 feet high and contains a standpipe three feet in diameter, encircled on the outside with a winding iron stair to the top. The water was let into the pumping well and the pumps began to work July 20, 1867. In this month a new engine had



CHICAGO AVENUE WATERWORKS.

been put in place at an expense of $112,350, with a capacity of 18,000,000 gallons of water a day.

The great fire of 1871 nearly destroyed the pumping station, and three of its engines were disabled. The damage to the engine house was speedily repaired, the machine shop was built on the same site, and the engines put to work, one after another, within three months. The loss on the pumping station, reservoirs and piping by the great fire amounted to $248,910.

In the year 1871-72 the quantity of water delivered was 8,423,890,966 gallons, or 497,206,126 gallons more than in the preceding year. There were 91,129 feet of pipe laid, at a cost of $316,165, making the total amount of piping in the city 287 miles. There were 115 fire hydrants erected, making a total of 1,667. The receipts from water assessments and taxes were $445,834, and the total income was $4,127,419. The total cost of addition to the works was $432,719. The total expense of the waterworks to date was $4,712,615. The cost of delivering water per million gallons was $12.

In 1873, the pumping station proving inadequate, a new engine, designed by City Engineer Cregier and constructed by Knapp Fort Pitt Foundry Works, was provided. Its cylinders were seventy inches in diameter, and had a stroke of ten feet. The working beams were twenty-eight feet long and weighed twenty tons each. The fly-wheel was twenty-five feet in diameter and weighed forty tons. Its three boilers were each twenty feet long and twelve feet in diameter. The engine cost $188,400, and during the first six and one-half months pumped 6,448,000,000 gallons of water.

As the consumption of water continued to increase rapidly, it became evident in 1871 that a new tunnel was imperatively demanded. It was therefore determined to build a tunnel seven feet in diameter from the crib to the pumping station, parallel to the first tunnel. But the second tunnel, instead of stopping at the pumping station, was continued on land to Ashland avenue and Twenty-second street, where a new pumping station was provided to pump the water into the mains of that part of the city. The land tunnel is 3.92 miles in length. The work on this land and water tunnel was begun January 12, 1872. The lake section was completed July 7, 1874, and the final connection with the land section was made in February of the next year, when the water was let in. The lake section cost $411,510 and the land section $545,000, a total of $965,510.

The demand for more water continued to exist, but after 1875 there were constant complaints that the supply was impure. The city government therefore decided to extend its tunnels further out in the lake and draw its supply four miles from shore, where it was expected the supply would always be pure. As a result the four-mile crib was built off Peck court. The first two miles counting from the crib is an eight-foot bore but from there the tunnel was divided into two six-foot bores. The land portion of the tunnel system has two sections. One of these runs from a shaft at Park row to the pumping station at Indiana avenue and Fourteenth street. The other extends in a northerly direction from the Peck court shaft to the central pumping station. The total length of the system is 5.75 miles and cost $1,526,143. This great work was begun in 1887 and completed five years later.

Tunneling now became chronic with the city, and in 1887-88, a seven-foot tunnel was constructed from the North pumping station eastward to the breakwater and an extension of the same diameter was made between 1895 and 1897 from the breakwater crib to a shaft at the two-mile crib, at a cost of $259,832. In 1890 a crib was erected two miles off shore at the foot of Montrose boulevard and a tunnel built to a pumping station at a cost of $530,097. The work was completed in 1896.

The greatest work of tunneling in connection with the water system was undertaken in 1892 and finished in 1897. This starts at the great crib called after the elder Carter H. Harrison, located two miles off shore at Sixty-eighth street. The tunnel connection with this crib is complicated. A seven-foot tunnel connects the crib with the pumping station at Yates avenue, a five-foot tunnel from the station extends to and connects with a seven-foot tunnel about 5,000 feet from shore, and a six-foot tunnel runs to a submerged intake about 4,500 feet from shore. The total cost of the tunnel and crib construction was $727,471.

What is called the Northeast crib is located two and a half miles off the foot of Oak street and is connected with a shaft on shore by a ten-foot tunnel. A land tunnel runs from Oak street and Grand avenue, connecting with the shaft in Green street. The second section runs from this point to a shaft and pumping station at Central Park avenue and Fillmore street. This is eight feet in diameter. A third section begins at Green street and Grand avenue and extends to the shaft in the pumping station at Springfield avenue and Bloomingdale road, with a diameter of eight feet. In this system the land and lake tunnels measure twelve miles and cost $4,000,000.

These heroic efforts of the city to obtain a supply of pure water were successful as to quantity, but disappointing as to purity. It was discovered after years of effort and failure that it was impossible to draw pure water from the lake as long as the city sewage poured into it. This failure led at last to the greatest engineering feat of the last century, the turning of the Chicago river from the lake by the construction of the drainage canal and the obliteration of the watershed between the waters of the Mississippi and Lake Michigan.

The following table shows the growth of the water-works system of Chicago in five-year periods since 1854, when the first large pumping station was installed at Chicago avenue.

DATE.	Population.	Gallons Pumped Per Day.	Gallons Per Capita.	Pipe Mileage.	Income.
1854	65,772	591,083	8.9	30.0	.....
1860	109,260	4,703,525	43.0	91.0	$ 131,162.00
1870	306,605	21,766,260	70.9	272.4	539,180.00
1880	491,516	57,384,376	116.7	455.4	865,618.35
1890	1,208,669	152,372,288	126.0	1 205.0	2,109,508.00
1900	1,698,575	322,599,630	160.6	1,872.0	3,250,481.85
1904	2,000,000	398,985,350	203.3	1,978.0	3,834,541.30

This immense quantity of water pumped had grown to 137,515,701,965 gallons in 1903, and last year 146,280,598,353 gallons were used.

The capacity of the Chicago water system can best be judged from a list of the pumping stations and their capacity per day in gallons, together with the authorized increases:

STATION.	Present Capacity.	Changes and Additions Authorized.	Total Capacity.
Fourteenth Street.....	84,000,000	.....	84,000,000
Sixty-eighth Street ..	82,000,000	20,000,000 added.	
		2,000,000 inc. in cap.	104,000,000
West	60,000,000	... .	60,000,000
North.....	65,000,000	50,000,000 added.	
		16,000,000 taken out.	99,000,000
Springfield Avenue....	60,000,000	40,000,000 added.	100,000,000
Central Park Avenue..	60,000,000	40,000,000 added.	100,000,000
Harrison Street.....	36,000,000	.....	36,000,000
Lake View.....	44,000,000	4,000,000 inc. in cap.	48,000,000
Washington Heights...	2,900,000	3,000,000 added.	
		400,000 taken out.	5,500,000
Norwood Park.....	600,000	....	600,000
New Roseland Station.	.....	50,000,000	50,000,000
Totals.....	494,500,000	.....	687,100,000

The annual income from the water system of Chicago is now close to $4,000,000 a year, and its expenditures for actual operation and keeping up the system less than $500,000. For the past few years about $1,500,000 has been appropriated annually for the water department, but over a million of this has been used on the land tunnels each year.

At the same time that the water department earns so much money, it also furnishes water cheaper than any other large city in the country whether tested by water rates per 1,000 gallons, or the water tax for an average eight-room residence, as shown in the following table.

CITIES.	Rate per 1,000 Gallons.	Water Tax for Eight Room Residence.
Kansas City.....	$0.36	$26.50
Omaha.....	.30	.....
St Louis	.30	27.00
Milwaukee.....	.20	24.50
Boston.....	.18	22.00
Chicago	.04	11.50

There can be no standstill in the development of the water system of the city. Provision must be made for the future. Following is a summary of the most important improvements now under way.

	Time of Completion.	Estimated Cost.
North (Chicago Avenue) Pumping Station.....	1906	$ 400,000
Springfield Avenue Pumping Station	1906	90,000
Central Park Avenue Pumping Station.....	1906	90,000
Sixty-eight Street Pumping Station.	1906	40,000
Washington Heights Pumping Station	1906	20,000
South Side (Roseland) System.....	1909	2,000,000
Large Water Mains.....	1906	750,000
Total cost.....	.....	$3,390,000

Many additional improvements are authorized which will cost in the neighborhood of a million dollars. These include the extension of the Chicago avenue tunnels to the Carter Harrison crib, the reconstruction of the cross-town tunnels so they will begin entirely on city property, and new boiler plants.

When all the improvements now authorized and under way have been installed, the total pumping capacity of the city's pumping plants will be 678,000,000 gallons per day. This will provide for a daily consumption of 217 gallons for a population of about 2,370,000.

CHAPTER X.

THE DRAINAGE CANAL.

CHICAGO'S struggle for a water supply sufficient to meet its demands had scarcely been won before an even greater problem confronted the city —the keeping of the inexhaustible stores of Lake Michigan pure. The constant stream of sewage poured into the Chicago river and the lake was extending the pollution further and further from the shore. The intakes of the cribs which had been forced as far as four miles out into the lake were not beyond the danger zone. The tunnels might be driven double the distance from the shore, but it was only a question of time until the pollution would reach these new limits.

There was but one logical solution and that was to stop discharging the sewage into the city's water supply. The Chicago river as the main drainage channel of the city must be made to flow away from the lake, the entire sewerage system turned into it and the river in turn made to flow toward the Gulf of Mexico. To do this the portage traversed by La Salle, Joliet and Father Marquette, and which gave to Chicago its existence, had to be done away with and the water shed between the Great Lakes and the Mississippi pierced by a new channel.

As a result of these plans the drainage canal was built, the greatest work of its kind in the last century. Up to date this great undertaking has cost the taxpayers of Chicago upwards of $45,000,000. The waters of Lake Michigan are flowing into the Chicago river and what was formerly a black, murky, oily stream is now a clear, swift flowing river.

The Sanitary District of Chicago was organized under an act of legislature passed in 1889. The first board was elected December 12, of the same year to serve until December 2, 1895. Since that time the regular term of service of the trustees has been five years. The primary object of the work undertaken by the sanitary district is the protection of the waters of Lake Michigan from sewage pollution. It is the purpose of the district to preserve this great natural reservoir in its purity.

The construction of the main drainage channel, extending from Robey street at the Chicago river to Lockport, a distance of 28.05 miles, was the first step taken by the city in building its new drainage system. With that channel complete it was necessary that the Chicago river be deepened and widened in order to secure an adequate flow of water through it without injury to navigation. Nor was this all. While the Chicago river carried off the bulk of the city's sewage, to the north and south the main sewers of these districts were discharging their polluting flow into the lake. The city therefore decided to construct a system of great intercepting sewers, which were to divert this flow of sewage from the lake to the river and thence into the drainage canal. These intercepting sewers have been about completed and will practically stop all pollution of the lake from sewage drainage coming from the city proper.

This left the great suburbs to the north and south still befouling the lake and in order to bring them into the sanitary district, the legislature of 1903 enacted a law for the annexation of these adjacent territories. The original sanitary district contained 185 square miles. By the act of July 14, 1903, the district was enlarged by the annexation of the North Shore district, comprising 78.6 square miles and the Calumet district with 94.48 square miles. This brings the total area of the districts up to 257.08 square miles. The North Shore district includes the towns of Evanston, Niles, New Trier, and portions of the townships of

WESTERN UNION BUILDING.

Northfield and Main and also Norwood Park. The Calumet district takes in the township of Calumet and portions of Worth, Bremen and Thornton. By the reversal of the Calumet river, providing a gravity flow therefrom into the main channel of the sanitary district at Sag valley, that entire district will be drained to the south.

The topography, hydrography of the North Shore district precludes a gravity channel and therefore it is proposed to cut a canal from the lake at some point north of Evanston, southward to the north branch of the Chicago river at Lawrence avenue. Water for the flow through this channel will be supplied by pumps with a capacity of 60,000 cubic feet per second. A pumping plant is to be erected near the lake for this purpose.

Water was first turned into the main channel on January 2, 1900. It took thirteen days to fill the channel from Western avenue to the controlling works at Lockport. January 17, following, the great bear trap dam was lowered and the flow of water from Lake Michigan to the Mississippi and the Gulf had begun.

The controlling works are located at Lockport at the end of what is known as Section 15 of the channel. They comprise seven sluice gates of metal, with the necessary masonry bulkheads and one bear trap dam. The sluice gates have a vertical play of twenty feet and openings of thirty feet each. The bear trap dam has an opening of 160 feet and an oscillation of seventeen feet vertically. This dam is essentially two great metal leaves hinged together and working between masonry bulkheads. The down-stream leaf is securely hinged to a very heavy foundation, and the up-stream leaf is so placed as to present the barrier to the water. This structure is operated by admitting water through properly constructed conduits, controlled by valves beneath the leaves just described. To raise the crest of the dam, water is admitted from the up-stream side and the discharge shut off until the desired height is obtained, and then the valves are adjusted so that the volume of water beneath the leaves shall be constant. To lower the crest, the water beneath the leaves is drawn off until the desired height is reached, when the valves are agin arranged so as to maintain a constant volume of water.

Beyond the controlling works the drainage board has completed the work necessary for conducting the flow from the channel in conjunction with the waters of the Desplaines river, down the declivity through the city of Joliet. Changes have also been made in the Illinois and Michigan canal to meet the new conditions.

In constructing the channel the work was divided into twenty-nine sections numbered from 1 to 15 southwesterly from Willow Springs and lettered from A to O, omitting the letter J, easterly from the same point. This makes the sections a little less than a mile long. Earth was first broken on "Shovel Day," September 3, 1892, on the rock cut just below Lemont.

The total amount of excavation involved in the construction of the main channel is 26,693,000 cubic yards of glacial drift and 12,265,000 cubic yards of solid rock, a total of 38,958,000. In the work of river diversion 1,810,652 cubic yards of glacial drift and 258,659 of solid rock were taken out, making 2,069,311 cubic yards. The work between Lockport and Joliet, including the controlling works, involved 1,201,724 cubic yards of excavation, making an aggregate for the main channel, river diversion and other work, of 42,229,035 cubic yards. In the retaining walls and bridge masonry were put 457,777 cubic yards all laid in cement mortar. The rock when broken up expands about 80 per cent and there are now on the spoil banks along the channel, looking like a diminutive mountain range, 22,542,586 cubic yards. The whole volume of this dumpage, both rock and earth, would make in Lake Michigan in forty feet of water, an island a mile square and above twelve feet above the surface of the lake.

In addition to this tremendous volume of excavation the main channel extension and waterpower development involves 10,500 cubic yards of earth, 1,274,000 of rock and 145,000 of masonry and concrete.

The distance from the mouth of the Chicago river to the juncture of the west fork of the south branch and the drainage canal at Robey street is six miles. From Lake street to Robey street the river is to be widened to 200 feet and given a depth of twenty-six feet for 100 feet in the middle of the stream and shallowing to sixteen feet at the docks. It is to be docked with both timber and concrete along this entire river frontage. The drainage board has purchased about 500,000 square feet of land in order to widen the channel and over 3,000,000 cubic yards of dredging has been done and about 12,000 feet of docks built. As soon as the tunnels are lowered the channel of the river will be lowered to twenty-six feet the entire distance.

Thirteen bridges have been built across the canal proper, six for public highways and seven for railroads. The weight of the iron and steel in these structures is 22,862,454. Two bridges have been built at Joliet across the Desplaines and fourteen will be built over the river in Chicago.

The general dimensions of the entire channel are as follows:

	Miles.
Distance from mouth of river to juncture with canal at Robey street	6
Main channel proper, Robey street to Lockport	28.05
Total length of channel	34.05

The dimensions of the canal proper, are: Robey street to Summit, 7.8 miles; 110 feet wide at bottom; 198 feet at water line with minimum depth of water, 22 feet. Summit to Willow Springs, 5.3 miles; 202 feet wide at bottom, 290 feet wide at water line with 22 feet depth of water; grade of earth channel 1 foot in 40,000 feet, or $1\frac{5}{8}$ inches per mile. The side slopes in earth are one foot vertical to two feet horizontal. At Willow Springs the channel narrows to the walled and rock cross section, extending 14.95 miles to Lockport, 160 feet wide at bottom, 162 feet at top; grade in rock 1 foot in 20,000, or $3\frac{1}{4}$ inches per mile.

The velocity in earth is figured for $1\frac{1}{4}$ miles per hour and in rock 1.9 miles per hour.

The total cost of the drainage canal and the supplementary improvements in the river, but not including the intercepting sewer systems is shown in the following:

Right of Way		$ 5,224,784.85
Diversion Desplaines River		1,142,578.32
Main Channel—Robey Street to Lockport		20,488,378.92
Controlling Works		339,127.00
Desplaines River Improvement—Lockport to Joliet		1,580,414.62
Chicago River Improvement		4,103,078.89
Illinois and Michigan Canal Improvement		77,016.08
Water Power Developing		468,380.51
Thirty-ninth Street Pumps		151,024.42
Capitalization and Maintenance of Bridges		566,833.85
Interest on Bonds and Tax Warrants		6,602,704.05
Taxes		27,937.53
Engineering Department		1,989,014.57
Clerical Department		161,196.27
Law Department		868,512.15
Treasury Department		37,377.84
Police Department		378,603.04
General Account		814,307.77
City of Chicago		13,434.95
Land Damages		76,331.84
Marine Damages		9,647.32
Personal Injuries Account		4,082.50
Bridgeport Pumping Works		90,388.80
Special Commission Chicago Drainage Canal		33,075.97
Telephone Line		11,863.70
Weir, McKechney & Co		22,118.14
Streeter & Kenefick		5,020 02
E. D. Smith & Co		2,400.00
Total Disbursements		$45,289,033.93
Emergency Funds in hands of Department Officials	$ 24,800.00	
Balance in hands of Treasurer, December 31, 1904	1,324,693.15	1,349,493.15
		$46,639,127.08

The Sanitary district had collected in taxes up to December 31, 1904, $29,861,623.72. The district has issued $24,790,000 of bonds, all payable in currency; $8,000,000 being 5 per cent bonds, $5,600,000 being $4\frac{1}{2}$ per cent bonds, $390,000 being $3\frac{1}{2}$ per cent bonds and $10,800,000 being 4 per cent bonds, running from one to twenty years, except the $3\frac{1}{2}$ per cent bonds, which runs for twenty years from date. One-twentieth of the issue must be paid off and retired each year. Of the total amount of bonds issued the sum of $8,380,000 have been retired, leaving $16,410,000 outstanding

December 31, 1904. The taxes afford a revenue sufficient to pay the interest on these bonds, to pay off and retire one-twentieth of the issue each year and leave a surplus to apply upon the current obligations of the district incurred for construction and other purposes.

Besides the primary object of affording a solution to the sanitary problem of Chicago, the canal is expected to develop two things of scarcely less importance than the primary object itself. One is a commercial waterway, that will be of inestimable value, not only to Chicago, but to all people all along its line, from the Lakes to the Gulf. The second is a great waterpower which, distributed by means of electricity, may yet line the banks of the canal with factories of great importance. The board is now developing this waterpower which it has conserved, the legislature in 1903 granting it the needed authority. The board has also very wisely taken title to much of the land along the banks of the canal, so that it will not have simply the power to supply, but also the sites themselves. In this great work Chicago has asked no assistance, either from the nation or the state, but the further development of the waterway project to the Gulf will undoubtedly have to be done by the general government. It is estimated, however, that this waterway completed to the Mississippi River will not involve as great a cost as the canal has already cost Chicago.

The first election of trustees in 1889 resulted in the selection of John J. Altpeter, Arnold Gilmore, Richard Prendergast, W. H. Russell, Frank Wenter, Christopher Hotz, John A. King, Murray Nelson and H. J. Willing. The board proved to be anything but harmonious. To many of the gentlemen on the board the important and practical questions were entirely new, and they found it impossible for a majority of them to agree. The result was that Murray Nelson resigned June 19, 1891; John A. King, July 22, 1891, and Henry J. Willing, September 23, 1891. On November 3, 1891, William Boldenweck, Lyman E. Cooley and Bernard A. Eckhart were elected to fill the three vacancies. On January 16, 1892, Christopher Hotz resigned, and at the next election, November 8, 1892, Thomas Kelly was elected his successor. By special provisions of the law, the first term of the trustees was six years. After that a new board was to be elected every five years. November 5, 1895, William Boldenweck, Joseph C. Braden, Zina R. Carter, Bernard A. Eckhart, Alexander J. Jones, Thomas Kelly, James P. Mallette, Thomas A. Smyth and Frank Wenter were elected trustees. It was under the superintendence and direction of these nine gentlemen that most of this great work has been done.

MINIATURE FORT DEARBORN, GARFIELD PARK.

CHAPTER XI.

CHICAGO'S PUBLIC SCHOOL SYSTEM.

IN its public schools and great institutions of learning, Chicago has reached its ripest fruitage. Three hundred thousand children and students bear daily witness to the city's devotion to the highest ideal of free education. No civic institution is guarded with such jealous care. The schools of Chicago are run by the people, for the people and to teach what the people want.

The ordinance of 1787 ordained that in the newly created territory of Illinois, "religion, morality and knowledge being necessary to good government and the happiness of mankind, schools and the means of education shall forever be encouraged." Nowhere in the vast domain of the Northwest has this idea been more sacredly guarded, so that to-day after a century of growth and development, Chicago with its public school system, its universities and its professional schools is to-day one of the foremost educational centers in the world.

Chicago spends in round numbers $13,000,000 a year on its public schools, and the amount is constantly growing. It has 341 school buildings, valued at $31,135,900, and many of them are of the most modern type of school architecture. These are attended annually by over 282,000 pupils and taught by 5,614 teachers and principals. The total cost for instruction per pupil for last year, based on the average daily attendance, was about $28.75.

Vast as are the sums spent annually for educational purposes, the school system is inadequate to keep pace with the natural increase in population. The buildings owned by the city contain 4,905 classrooms, in addition to assembly halls, offices, recreation rooms and gymnasiums. Besides these 138 classrooms are rented, giving the schools a seating capacity of 252,324. This forces many children to be deprived of a full day, and only half-day sessions are provided in the most congested districts. About $2,500,000 is invested annually by the city in new sites and buildings. So rapid is the increase in population, however, that the natural birth rate of the city greatly exceeds this added capacity. Only by doubling the expenditures and building twice as many new schoolhouses each year can Chicago hope to give every child in the city equal advantages of a common-school education. There are now (1905) under construction nineteen new school buildings, containing 414 classrooms, and costing $2,735,000. Sites have been selected for forty-two additional buildings, which will add 658 classrooms, and cost $5,300,000. While their erection has been authorized they will not be completed for the next two years.

The latest type of building is absolutely fireproof. The school board is building none other at the present time. A complete building includes twenty-six classrooms, assembly hall on the first floor, and gymnasium above. It includes the usual play rooms, toilet rooms and heating rooms in the basement, and space which may be used in the future for domestic science and manual training. There are also included the usual principals' offices, teachers' rooms, libraries, etc., in each building.

Wherever possible the sites for new buildings are large enough to include playgrounds which are regarded as essential whenever possible to acquire. The board is building several 12-room school buildings which, in each case, are the first portions of future 24 or 26-room buildings. They are so designed that additions may be put on and conform to the original portion. A 12-room building may be increased to 16 rooms or 20 rooms, or 26 rooms without in any way differing from the ultimate plan for a complete building.

Of the 341 schools there are three normal schools and sixteen high schools. They have the highest class of equipment and teaching force. The Wendell Phillips High school represents the best type of modern schoolhouse.

With these material evidences of development in the Chicago school system are allied high civic ideals in the administration of the schools, the modification of the course of study to conform to the existing conditions and needs of the pupils, and the earnest co-operation of the teaching force in working out their ideals.

The educational spirit of Chicago took root early. In 1810 John H. Kinzie was the only scholar and he was taught by Robert A. Forsyth, who subsequently became paymaster in the United States army. The pupil was six years old, his teacher but thirteen. It was not until 1816 that William L. Cox, a discharged soldier, opened the first school in a log hut on the Kinzie lot, near Pine and Michigan streets. Here John Kinzie, his two sisters and brother and three or four children from Fort Dearborn attended school. There were several other private schools conducted in the settlement during the next eighteen years, but it was not until 1833 that the first "public school" was started in Chicago. Miss Eliza Chappel was the first teacher. She had first come west from Rochester, New York, as a teacher at Mackinac. When Mayor Wilcox came from there to Fort Dearborn she came with him and opened a school for children in the fort and the little settlement about the fort. Chicago was not then even a village. In 1834 the town made an appropriation for Miss Chappel's school, making it the first public school of Chicago. The following year, 1835, the Rev. Jeremiah Porter, who had organized the first church in Chicago, was married to Miss Eliza Chappel, who had taught the first public school. And it may be added with the utmost emphasis that they "lived happily ever after" for some sixty years. Miss Chappel was succeeded as teacher by Miss Ruth Leavenworth, when Mr. John S. Wright, built at his own expense the first schoolhouse. As Mr. Wright, thirty years later, said: "The honor is due to my sainted mother. Having then plenty of money it was spent very much as she desired. Interested in an infant school, she wanted the building and it was built." The next teacher was Miss Frances L. Ward, who afterward married the Rev. John Ingersoll, father of Col. R. G. Ingersoll.

BAND STAND, GARFIELD PARK.

The original school section as provided for by the ordinance of 1787, and located by Illinois legislation, was placed in the heart of the present business section of Chicago, within what are now Madison, State, Twelfth and Halsted streets. Had some genius foreseen the greatness of Chicago's future and saved this inheritance for the public schools its unparalleled richness would

have provided a fund that would have made Chicago's schools the richest in the world. As it was this tract was sold at auction in 1833, with the exception of four city blocks, and the sum of $38,619.47 realized. What the value of those 142 city blocks now are it would be hard to estimate. Few areas of land in any of the cities of the world would command a higher price to-day.

In 1835 the state legislature passed an act to establish a "special school system for township 39, range 14, east of the third principal meridian." As Chicago was not incorporated until the following year that was as near as the lawmakers could designate it. The next legislature having incorporated the city, made haste to provide for it a more thoroughly organized common school system, with trustees having full power to assess and collect taxes and with inspectors with more or less power to manage school affairs. One of the provisions of the city charter, approved March 4, 1837, reads as follows:

"Section 85. The common council shall annually appoint a number of inspectors of common schools in said city, not exceeding twelve and not less than five, which inspectors, or some of them, shall visit all the public schools in said city at least once a month, inquire into the progress of the scholars and the government of the schools, examine all persons offering themselves as candidates for teachers, and, when found well qualified, give them certificates gratuitously, and remove them for any good cause; and it shall be the duty of said inspectors to report to the common council from time to time any suggestions and improvements that they may deem necessary or proper for the prosperity of the school."

While the inspectors were to be appointed by the common council, the trustees who had the power to assess and collect the taxes were to be elected by the legal voters in each school district.

In 1839 the city charter was so amended by the legislature as to turn over to the common council the entire responsibility for school matters. Not only the seven persons to be inspectors, but the three persons in each district to be trustees, were to be appointed by the common council. In 1840 the city was divided into four districts. The four teachers that year were each given a salary of $400. Only one school building was then owned by the city. That was in District No. 1, at the southeast corner of Madison and Dearborn streets. There were reported that year 317 pupils in all, of whom 64 were studying geography, 29 grammar. and 57 arithmetic. The number of white persons in the city under twenty years of age was then 2,109.

The first high school was established in 1856. The normal department in connection with it was made, in 1871, an independent school. The development of the high school since then has been rapid. Sixteen magnificent buildings are now attended by almost as many thousand students. The course of study has been gradually advanced and to-day a diploma from the Chicago high schools will admit into most of the colleges and universities of the country.

The central idea of the Chicago school system "to prepare the pupil for life's experiences" is exemplified in the manual training courses for the boys and the cooking classes for the girls. These are begun in the seventh and eighth grades, and continued in the high schools. In Chicago's complex population, representing nearly every foreign country on the globe, the value of this training gives the child a new point of view, makes the boy or girl strive for higher things and reflects itself in the home life on the parents of the children themselves.

There are no less than 14,000 boys and as many girls taking advantage of these opportunities. At the Manual Training High school there is an enrollment of 1,000 young men who, while having the benefit of a high-school course in literature, science and history, equal to any school of the kind in the country, are laying the foundation for a technical training by working in metal and wood.

There is now being planned a great commercial high school in the center of the city that will offer the same advantages for a business training as the manual training school offers in mechanical lines. This school will give to the graduates of the elementary schools an opportunity to prepare themselves for business life, without the expense of attending a commercial college.

But Chicago in its great public school system goes still further, and offers to those who didn't have an opportunity to go to school when children, or who came from foreign countries and want to learn the language, a chance to learn after working hours, in the evening schools. In these classes can be seen fathers and mothers studying with their children. The courses offered are not confined to the rudimentary studies. The girls and women are taught cooking and sewing, and the men and boys are given instruction in mechanical drawing. Business courses in bookkeeping, typewriting and shorthand are also offered. The evening schools are conducted as a help to the men and women who need help and to give them what they want. The attendance has been rapidly increasing, showing that they are appreciated and doing the work of training, especially the foreigners, in the fundamentals of good government and citizenship.

Chicago's kindergarten system has been brought to a high degree of efficiency. About half the schools have kindergarten classes. These are attended by 10,000 children, mostly in the poorer sections, where the percentage of foreigners is great. Many of the little folks

INTERNATIONAL HARVESTER CO.'S OFFICES.

get their first knowledge of the English language in the kindergarten.

In addition to the great public schools there are many religious elementary schools, the Catholic church maintaining no less than 166 in connection with their parish churches. These have an annual attendance of upwards of 70,000 pupils, which with the other denominational and private schools swell Chicago's grand army of school children to over 400,000.

CHICAGO'S UNIVERSITIES AND COLLEGES.

Chicago has taken her place among the great university towns of the world only during the last decade. This advance movement in higher education may be dated from the time of the Columbian Exposition. Since then Chicago has made giant strides as a center of higher education, and has now nearly 15,000 students engaged in college, university and professional studies, as many as have the six New England states combined. If all these institutions were grouped together under one head, as are the higher educational schools of Paris, Chicago would have the greatest university in the world.

There is no unity of control of these higher educational institutions. They are chiefly of three classes: The state schools, represented by the professional departments of the University of Illinois; the denominational schools, which are under the control of the church, though not necessarily sectarian in their teachings, and the private institutions. The first and second groups give the student vastly more than he is asked to pay for. The third group includes both endowed schools and institutions that are forced to be entirely self-supporting.

The University of Chicago stands pre-eminently at the head of the higher educational system of Chicago and of the West. When the Columbian Exposition opened it had been in existence but a few months. In order to make a good showing to the world, large preliminary subscriptions were received, but its tremendous growth under the masterly direction of Dr. William R. Harper has brought more millions to its support than was ever dreamed of, even by that master mind of organization. In 1893 it had four blocks of land on the Midway and a fair start on the magnificent quadrangle of buildings. To-day it owns practically all the land on both sides of the Midway plaisance, extending from Washington Park to Madison avenue, a distance of three-quarters of a mile. It had 700 students in 1893; to-day it has nearly 5,000. The buildings, the equipment and the teaching force have grown in proportion.

Magnificently supported by the rich men of Chicago it has back of it the good will and millions of John D. Rockefeller. Between him and President Harper there is the closest bond of friendship and trust. The recent serious illness of Dr. Harper awakened the sympathy of the entire country.

It has been a fixed policy with President Harper to affiliate with the university strong professional schools. When he has thought best he has founded these schools,

but more often has he taken them in as already established. The University of Chicago law school was founded only two years ago. It has a fine building of its own and contains a library of 40,000 volumes. Like the other professional schools of the university it is preeminently a graduate school.

The medical school of the university was formerly Rush Medical College. Since it was incorporated into the university its requirements for the enrollment of students has been raised and its equipment and teaching force enlarged. Its enrollment is about 300.

The College of Education of the University of Chicago was founded by Mrs. Emmons Blaine. It serves the double purpose of a training school for teachers and an experimental station for the professors and students of psychology at the University. The University College was also endowed by Mrs. Blaine. It is a downtown branch of the University where classes are given in the afternoon and evening and on Saturdays for the benefit of teachers and other students who cannot attend the regular lectures at the university.

The University High School resulted from a consolidation of the Chicago Manual Training School and the South Side Academy. Not counting the students of this department and in other preparatory schools controlled by or a part of the University, the total registration last year was 4,580.

The University of Illinois has located all its professional schools in Chicago because of the better facilities and the larger field. Here are the schools of pharmacy, school of medicine, dental school and law school.

Northwestern University in Evanston is practically one of Chicago's institutions of higher education. It is only a matter of a few years until that delightful suburb adjoining the city to the north will be knocking for admittance. Already Northwestern University has its four professional schools in the downtown district. The schools of law, pharmacy and dental surgery occupy the Northwestern University building at Lake and Dearborn streets, which was formerly the Tremont House. The school of medicine has a fine building of its own on the South Side. The total registration, not including preparatory students, exceeds 2,700.

Armour Institute of Technology was founded in 1892 by Mr. Philip D. Armour of Chicago. The work of instruction was begun in September, 1893, and is now carried on in the buildings at the corners of Thirty-third street and Armour avenue. The artistic and technical branches of the course in architecture are conducted at the Art institute, Michigan avenue and Adams street. The technical laboratory work of the course in fire protection engineering is given at the Underwriters' laboratory, 382 East Ohio street, Chicago. Honorable places are accorded athletics, all indoor work being done in the gymnasium in the main building, and all outdoor work on Ogden field, which was recently presented to the institute by Mr. J. Ogden Armour.

The institute consists of:

1. The College of Engineering.
2. Armour Scientific Academy.
3. The Evening Classes.
4. The Summer School.
5. The Department of Commercial Tests.

The College of Engineering offers courses in mechanical engineering, electrical engineering, civil engineering, chemical engineering, fire protection engineering, general science and architecture, all leading to the degree of bachelor of science.

Armour Scientific Academy prepares young men for admission to the engineering courses of the College of Engineering, or to the leading colleges and universities.

ARMOUR INSTITUTE.

The evening classes provide courses in engineering and kindred subjects adapted to the needs of those who are employed in technical pursuits during the day.

The summer school offers courses designed to meet the wants of teachers and special students who desire to extend their knowledge of scientific and technical subjects, of undergraduates who desire to shorten their regular courses, of new students who are deficient in certain studies required for entrance, and of those who are unable to attend during the school year.

The department of commercial tests offers facilities for all sorts of special tests and investigations.

The president, the Rev. Dr. F. W. Gunsaulus, has under his jurisdiction a staff of sixty instructors. The total number of students enrolled during 1904-'05 was 1,585.

The Lewis Institute in West Madison street was founded by Allen C. Lewis. He left a fund for its endowment which should be invested until it amounted to $800,000 and then turned over to the founding of a school. The plant and investments of the institute now aggregate a million and a half dollars. It offers technical and manual training courses as well as literary and high school courses. Like the Armour Institute, it is open to students at night.

St. Ignatius College is the largest of the Catholic schools of higher education in Chicago. It has a strong faculty and offers academic and university courses: Mayor Harrison is a graduate of St. Ignatius. It is in a prosperous condition and growing in strength and influence.

There are six large theological schools in Chicago, besides several smaller ones and several just outside the city limits. There are thirteen large medical schools, a dozen schools of pharmacy, otology, ophthalmology, odontology, and two large law schools, besides those named.

Chicago has also seven dramatic schools and many colleges of music, besides those connected with the larger universities, and the Art Institute contains the largest art class in the country.

DOUGLAS PARK.

CHAPTER XII.

CHICAGO'S LIBRARIES.

CHICAGO'S great libraries contain approximately 1,700,000 volumes. The public library has the greatest patronage of any similar institution in the world. Last year the aggregate circulation was 1,721,186 volumes, which went to the homes of Chicago's reading public. Of this number, 662,896 volumes were taken out from the thirty-eight delivery stations scattered throughout the city and the T. B. Blackstone Memorial branch library at Forty-ninth street and Lake avenue.

As a factor in the educational life of Chicago this great system is only second to the public schools. Reading rooms are maintained in the three great sub-divisions of the city in connection with the public library, and the other institutions supplement this service. The professional schools and universities maintain libraries of unexcelled excellence. That of the University of Chicago alone containing over 400,000 volumes and 165,000 pamphlets. All this in a municipality that had no existence before the law seventy-five years ago and was but a frontier fort at the beginning of the last century.

Like all of Chicago's institutions, its libraries had a humble beginning. John S. Wright carried the first library tied up in his handkerchief. It was the library in connection with the first Sunday-school, in 1832, and Mr. Wright has the honor of being Chicago's first librarian. His mother, it was, who at her own expense built the first building devoted to the uses of a school.

The first donation for a public library in the city was made by a couple of real estate speculators from New York. They sent a package of 200 books which had cost perhaps $50 for a public library. In 1835 the intellectual life of the town centered around the Chicago Lyceum. It was a debating society that furnished an opportunity for the social and literary advancement of the community. Among its membership was every man of any note in any trade or profession in the city. It had a library of 300 volumes, which at that early day was greatly appreciated.

The next movement that fostered the library idea was the founding of the Mechanics' Institute in 1837. It was incorporated six years later and had for one of its aims the "creation of a library and museum for the benefit of mechanics and others." By 1843 it had gathered a library of over 1,000 volumes. The fire of 1871 swept away its books and other property.

The Young Men's Association which was organized in January, 1841, had as one of its objects the establishing of a library. Walter I. Newberry, who in after life provided for one of the finest libraries now in Chicago, was chosen as the first president. A reading room was at once opened and Mr. Newberry furnished a nucleus for a library. When the association was incorporated in 1851 it had a library of 2,500 volumes. This had grown to 9,000 volumes by 1866. Two years later, in 1868, the Young Men's Association was reorganized and its name changed to the Chicago Library Association. This was the beginning of the free library movement, though its property and books were wiped out by the fire of 1871.

In April, 1856, the Chicago Historical Society was formed. The Rev. William Barry was the genius of the movement. He was its secretary and devoted himself to its interest with contagious enthusiasm. He secured the collection of over 3,000 volumes the first year. The society was incorporated in 1857. Within two years it had over 18,000 volumes. The fire of 1871 consumed 60,000 volumes, 1,738 files of newspapers and a vast number and variety of documents, many of which could never be replaced. Another fire in 1874

proved similarly disastrous. The present building is deemed absolutely fireproof. It cost $150,000 and was opened May, 1894. It has now a collection of over 40,000 volumes and 75,000 unbound volumes and pamphlets, besides numberless documents, maps and other insignia of value. The Union Catholic Library was organized in 1868.

It is a fact of more than local, indeed of international, interest that the initiative in the establishment of the Chicago Free Public Library was taken by an Englishman, Thomas Hughes, author of Tom Brown at Rugby, etc., of London.

The great fire of 1871 had well night swept Chicago out of existence. Never before in the history of the world had such a passion of sympathy swept over the country and manifested itself in such unprecedented ways in all civilized countries. At a meeting of the Association of English Authors, of which Thomas Hughes was chairman, the immediate needs of the afflicted city were discussed. It was not thought that anybody then could want for bread; it was felt that they would suffer for a time at least for want of books. An appeal, headed by Queen Victoria, signed by Thomas Hughes, Thomas Carlyle, Gladstone, Disraeli, Spencer, Tyndall, Tennyson and others, addressed to authors, publishers and booksellers, was sent forth. The result was that 7,000 volumes were collected and forwarded to Chicago. This collection formed the beginning of what was presently to be the Chicago Free Public Library.

Mr. Hughes appealed to the people of England to give to Chicago "a new library as a work of sympathy now and a token of that sentiment of kinship which, independently of circumstances and irrespective of every other consideration, must ever exist between the different branches of the English race." As Mr. Azel F. Hatch, the president of the board of directors of the library, said of this movement at the dedication of the new building: "It crystallized the sentiment that a public library was a necessity, and prompted our citizens to express their appreciation of the generous and sympathetic donation by founding this library and providing a place to receive and forever keep sacred this testimonial of universal brotherhood."

THE CHICAGO PUBLIC LIBRARY.

At a public meeting in Plymouth Church, Mayor Medill presiding, January 8, 1872, measures were taken to secure from the State Legislature, then in session, an act enabling the city to provide by taxation for a free library. It was what was known as the splendid action of Thomas Hughes and others in England which was the immediate occasion of this action on the part of the city.

The library was opened January 1, 1873. Mr. William F. Poole, author, but not finisher, of that invaluable

and never-ending work, "Poole's Index," was the first librarian, a man of extraordinary ability and experience, fitting him for the great task of creating and organizing the library. He continued in this position until 1887, when he became librarian of the new Newberry Library. He was succeeded by Mr. Frederick H. Hild, who remains in place to date.

The new library building was open to the public October 11, 1897. The total cost of the building, with its fixtures, machinery, etc., was $2,125,000. It had been formally dedicated two days before, the anniversary of the fire.

THE NEWBERRY LIBRARY.

The total number of volumes at the close of the library year 1904, was 290,277 volumes. The circulation for the year was 1,721,186 volumes, which does not include the use of the books kept open on the reference shelves nor the periodicals and newspapers in the reading rooms. The greatest freedom is allowed under the rules of the public library. Membership in the library can be secured by anyone presenting a certificate from a property owner, guaranteeing the library against loss.

The two other great public libraries of Chicago are monuments to the commercial spirit and liberality of its citizens. The Newberry Library and the John Crerar Library are sustained by the funds provided by the founders after whom they are named.

By the provisions of the will of Walter L. Newberry, who died November 6, 1868, one-half of his estate was given for founding a free public library to be located on the North Side. It was not until 1885 that the estate was divided when property valued at $2,149,403 was set aside for the library enterprise. The value of this endowment has steadily increased and is worth at least a million more than when first turned over. In 1889 the "Ogden block," where the magnificent building now stands, was purchased. The building was completed in 1894 and in its commodious halls is one of the finest collection of reference books in the world. In the departments of music, medicine, art and antiquity it is especially strong. It is entirely a reference library and no books are circulated. It contains about 300,000 books and pamphlets. John Vance Cheney is librarian.

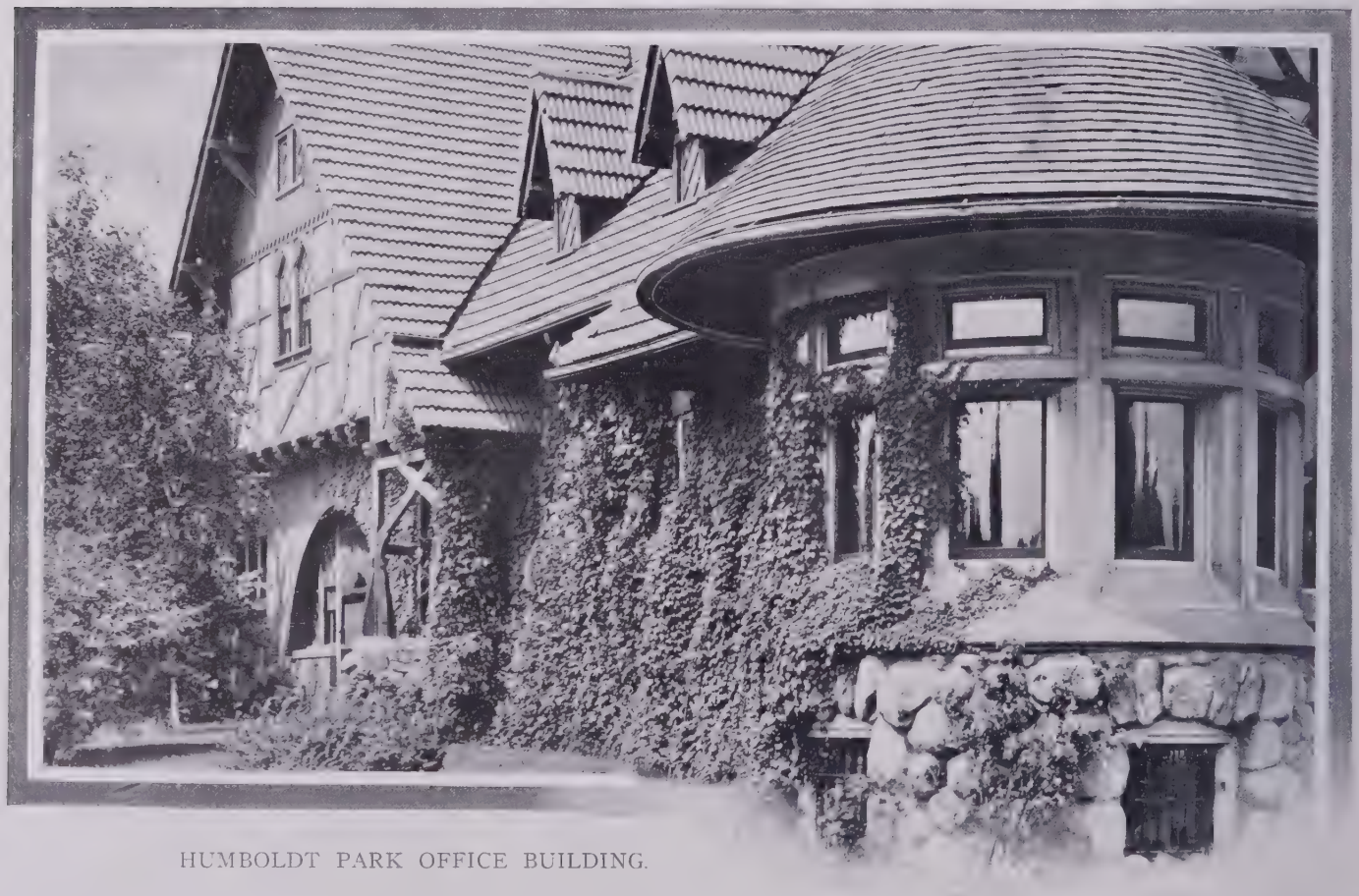
The John Crerar Library is the third of Chicago's great public institutions of the kind. It is planned to

erect a magnificent home for it in Grant Park on the Lake Front, when its collection of over 150,000 volumes on the social, physical and natural sciences will be transferred from their temporary quarters in the Field building. A portion of the income from the endowment has been set aside each year for a building fund and as soon as a site is provided the work of erecting the building will be begun. Its character as a scientific library has been strictly adhered to. John Crerar in his will expressed a desire "that the books and periodicals be selected with a view to create and sustain a healthy moral and Christian sentiment." Clement W. Andrews is in charge, as librarian.

In point of number of volumes the University of Chicago Library is the largest in the city. Like the university it is built on stupendous lines and contains over 400,000 books and 165,000 pamphlets. Its use is not restricted to the students of the University and others may have all the privileges on the payment of a small fee. Complimentary cards for four weeks are also issued to properly credited scholars visiting Chicago. Zella Allen Dixson is librarian.

The other libraries in Chicago and its immediate vicinity with the number of volumes they contain follow: Field Columbian Museum, 32,000; Lewis Institute, 12,000; Northwestern University, 91,000; Evanston, 34,600; Garrett Biblical Institute, 20,200; Ryerson, 3,500; Academy of Science, 19,800; St. Ignatius College, 20,000; Western Society of Engineers, 5,000; Chicago Law Institute, 40,000; Hammond, 23,000; Pullman, 9,000.

All these libraries are in a flourishing condition and steadily growing. There are also besides these a large and fast-increasing number of private libraries of great costliness and special value.



HUMBOLDT PARK OFFICE BUILDING.

CHAPTER XIII.

CHICAGO AS AN ART CENTER.

CHICAGO'S spirit of commercialism has been the foundation for her artistic development. It has made conditions possible for the success of her inspiring youth in the finer accomplishments of life. With the tremendous wealth it has produced came the means for gratifying the love of the beautiful and the encouragement of the artistic spirit of the community. This spirit has found expressions in an unrivaled park system in many superior private collections of works of art and most forcibly in the Art Institute of Chicago.

Housed in a beautiful structure on the Lake Front, the Art Institute is naturally and logically the focus and stimulus of the art efforts of Chicago and of a great part of the western and middle states. It has enrolled over 2,500 students that come from all sections of the United States, Mexico and Canada. The Academy of Fine Arts and a dozen lesser schools and studios and private classes will bring this number to over 5,000, a serious band of young American men and women who are devoting their efforts to the pictorial and plastic arts.

A liberal share of the profits of Chicago's great commercial enterprise has been devoted to art. The galleries of the institute bear witness to this generosity. They have been enriched by donations from private citizens as few other art museums in this country have been. Here the richest and most judicious collectors have brought their treasure for the benefit of the public. This is characteristic of Chicago. While in other cities many priceless treasures of art are kept aloof from the many and for the enjoyment of the few fortunate to possess enough wealth to own them, in Chicago there has been that public spirit which has donated them to a public institution for the benefit of all.

The Art Institute galleries are open free to the public 160 days of the year, and nowhere has the public shown such appreciation of the privilege. Nearly a million visitors come to the Art Institute in a year to inspect the pictures, sculptures and curios with which its galleries have been enriched by the liberality of the donations from private citizens. While not the richest, it has one of the most comprehensive exhibitions of art works in the world. Upon its walls and within its aisles may be found examples of nearly every famous master and celebrated school in the history of picture and plastic art. Its teachers and lectures are representatives of the best there is in the art schools of America, and its classes are drawn from the farms, villages and cities which stand for all that is most virile, most ambitious and youngest in the art movement of the United States.

The Art Institute was established a quarter of a century ago. Its purpose as defined in its articles of incorporation was for "the founding and maintenance of schools of art and design, the formation and exhibition of collections of objects of art and the cultivation and extension of the arts of design by appropriate means." How well it has carried out this purpose is manifest in the incomparable success it has attained.

George Armour was the first president and after he had completed a year of service he was succeeded by Levi Z. Leiter, who held the position for two years. He was followed by Charles L. Hutchinson, who has been continued year after year. Under the stimulus of his enthusiasm the real work of the institute began and attained its final success. Mr. Hutchinson and Samuel M. Nickerson are the only persons remaining who have been trustees during the whole history of the

institution. William M. R. French, the present director, has been in charge of the institute since its founding and the financial affairs have been directed during that time by Newton H. Carpenter.

Under the able direction of Mr. French the museum and school has taken a front rank and he has brought to its support many public-spirited citizens. For three years it had rooms at State and Adams streets. Mr. French at once started a school of art in connection with the institute and encouraged the holding of exhibitions. In 1882 a site was purchased at the corner of Michigan avenue and Van Buren street and a substantial brick building erected. Three years later additional property was secured and the building now occupied by the Chicago Club erected. This building was dedicated in November, 1887, but it soon was outgrown although additions were made to it during the next five years. In 1892 the structure was sold to the Chicago Club and the enterprise of erecting the present magnificent building undertaken.

THE ART INSTITUTE.

Taking advantage of the opportunities offered by the World's Fair in 1892, the Art Institute entered into a compact with the Columbian Exposition directors to assist in the erection of a building for the holding of the World's Congresses of Religions. The fair directors had appropriated $200,000 for this purpose and the Art Institute officers agreed to add whatever amounts were necessary to this to put up a permanent structure, which, after serving the purposes of the World's Congresses should be permanently occupied by the Art Institute. Permission was obtained from the city and the abutting property owners for the use of the Lake Front property and the present museum building erected at a cost of $648,000. The exposition company paid $200,000 of this sum and the Art Institute $448,000, most of which was realized from the sale of the old building at Van Buren street and Michigan avenue. The ownership of the building was vested in the city until 1904 when it was turned over to the South Park commissioners, while the right of use and occupation was vested in the Art Institute, as long as it shall fulfill the purposes for which it was organized. A special provision was also made for keeping it open free to the public three times a week.

In possession of this magnificent structure on the Lake Front the Art Institute at once began to receive

generous recognition from art patrons. Within a year after its completion it received gifts of fine art objects equal in value to half of the cost of the new structure. More than an equal amount has since been received, which never would have been offered if a proper place had not been provided for their reception.

During 1897 Charles W. Fullerton donated funds to build a lecture room in accordance with the original plans of the building, as a memorial to his father, Alexander N. Fullerton. In 1900-'01 the Ryerson Library was built and donated by Martin A. Ryerson, one of the trustees. It contains about 4,000 volumes strictly confined to fine art and includes many valuable works. It is a beautiful and commodious building and is consulted annually by over 50,000 persons. In 1903 a great sculpture hall, comprising the fourth side of the building, was erected by Mr. and Mrs. Timothy B. Blackstone. The hall was named after the donors, who also presented the great collection of architectural casts by which it is filled. Before the original design of the building is completed there will be added a grand central stairway and dome and extensive galleries over the Blackstone Sculpture Hall.

During the past ten years the collections given to the care of the institute have been numerous and important. It now ranks in this respect among the first three or four of the country. Among these contributions are the following:

The Henry Field collection of paintings presented by the widow of Mr. Field. It comprises forty-one pictures and represents chiefly the Barbizon School of French Painting.

The Munger collection bequeathed by Albert A. Munger after they had been on exhibition in the institute some time. This fine collection of paintings is one of the most comprehensive in the galleries.

The Nickerson collections presented by Mr. and Mrs. Samuel M. Nickerson, comprising a fine array of Japanese, Chinese and East Indian objects of art and a collection of modern paintings. The Nickersons also bore the expense of fitting up two galleries and the adjacent corridor with marble wainscoting and mosaic floor for the reception of the collection. This is the most magnificent single gift received by the institute up to this time.

The Elbridge G. Hall collection of sculpture donated by Mrs. A. M. H. Ellis. It includes only life-sized facsimiles of original works of sculpture, both of the renaissance and modern schools, the contemporary collection being the finest in America.

The Higinbotham collection comprising 109 facsimile reproductions of the antique bronzes of the Naples museum, statues, busts, tripods, statuettes, lamps and other objects found at Herculaneum and Pompeii. The collection was presented by Harlow N. Higinbotham.

One of the most notable additions to the collections of the galleries was the purchase of thirteen paintings from the Demidoff collection in 1890. These are works of the highest value by the old masters of the Dutch school and the reception of these pictures marked an epoch in the artistic development of the city.

The total endowments of the institute only aggregate $163,400 and most of this is restricted. In fact, only $39,400 is for the general purposes of the institute. Heretofore its support has been derived wholly from membership, dues, door fees and voluntary contributions. There are about 2,000 annual and 400 life members of various classes. Annual members pay $10 a year and life members $100 and henceforth are exempt. Governing members pay $100 upon election and $25 a year dues. Upon payment of $400 governing members become life governing members. Since the transfer of the Art Institute to the park commissioners they have been authorized by the legislature to permit extensions of the building and levy a tax for its support and that of the Field Columbian Museum. This will be a great advantage to the institute and allow the use of the membership dues and donations to be used in the purchase of additional works of art.

Such has been the progress of the Chicago Art Institute in the twenty-five years of its existence, practically without an endowment and supported mainly by the openhanded liberality of hundreds of its public-spirited men and women. This fact has made it more dear to Chicago and though in time it will enjoy, no doubt, the millions of many of its present supporters, the fact that it was not the growth of the munificence of any single person will bring a riper fruitage in the future.

In directing the artistic development of Chicago in the past few years, the Municipal Art League has had an important part. The objects of the organization are to encourage the improvement of the thoroughfares, public buildings and places of the city along purely artistic lines. It also aims to show officials and people the best methods of bringing about artistic municipal improvements and create in the individual a spirit of co-operation in the care of private property. While the membership of the league is selected by the mayor it has only advisory functions. Its governing board consists of the mayor or commissioner of public works, three park commissioners, three sculptors, three architects and three painters. Since its incorporation in 1901, the league has made many valuable suggestions.

CHAPTER XIV.

THE CHURCHES OF CHICAGO.

CHICAGO'S spiritual and temporal developments have gone hand in hand. From the first discovery of the portage between the waters of the Great Lakes and the Mississippi, when Father Marquette and La Salle pierced the northwestern wilderness, the two great forces of advancing civilization went hand in hand. As the city has grown rich and powerful, so the churches have increased in wealth and influence, until they number nearly a thousand with a membership of over a million.

To a Catholic priest belongs the honor of having conducted the first religious service in the territory now embraced in the limits of the City of Chicago. Father Badin, who is credited with being the first priest ordained in America, came to Chicago in 1796, three years after his admission to the priesthood in Baltimore. His second visit to Chicago was in 1822, at which time he performed the first baptism.

The Baptists were the next religious organization to come to the city. In 1825 the Rev. Isaac McCoy, a Baptist preacher, came to Chicago from his station in Michigan and preached the first sermon in the English tongue. The next year the pioneer Methodist preacher of Chicago appeared in the person of the Rev. Jesse Walker, who at the time was in charge of the Fox River Mission.

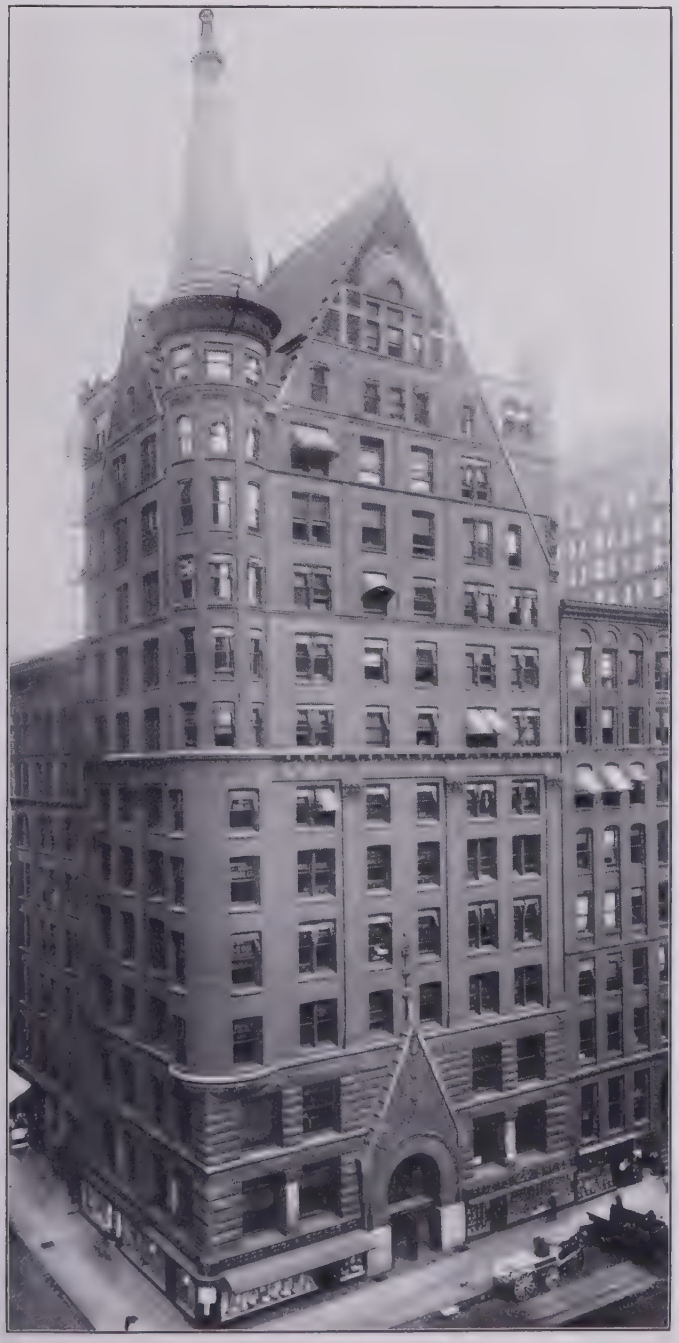
It was not until five years later that Chicago was formally recognized as a field for religious work. During the year the Illinois Methodist conference established the "Chicago Mission district," and began the holding of a regular weekly prayer meeting. This was followed by the establishing of a Sunday-school the following year. It was the Catholic church, however, that planted the first church in Chicago. St. Mary's parish was started in May, 1833, and the first church built at what is now the southwest corner of Madison street and Wabash avenue. The next month the First Presbyterian church was established, followed by the First Baptist in October of the same year. The pioneer leaders of these religious flocks were Father John Mary Irenæus St. Cyr, the Rev. Jeremiah Porter and the Rev. Allen B. Freeman. From this small beginning the great religious strength of Chicago has grown. The next year, in 1834, the First Methodist church was established and the first resident preacher installed.

Other denominations were soon attracted to the growing young village at the lower end of Lake Michigan. In 1836 the Episcopalians, Universalists and Unitarians each established a church and installed resident clergymen. St. James was the pioneer Protestant Episcopal parish. This goodly start sufficed for the next nine years and it was not until 1845 that other congregations were formed. In that year the few Jews living here organized a religious society. The German Lutherans established a church the same year and two years later the Norwegian Evangelical Lutheran church was founded. In 1849 the Swedenborgians built their first house of worship and the Christian church followed during the next year.

These different denominations fully met the religious requirements of early Chicago. There were many Congregationalists among the early Chicago settlers, but they for many years affiliated themselves with the Presbyterians. It was not until 1851 that they established an independent church of their own denomination. The First Presbyterian church was founded by a Congregationalist and most of its members were of the same faith. This Presbyterian tendency of the Congregationalists continued until there was a division over the anti-slavery question. Congregationalism has been strongest in the New England and northern states and

they had no churches south of Mason and Dixon's line in the early days. On the other hand the Presbyterians were strong in the South. So the advocates of the anti-slavery movement fellowshipped with the slave owners reluctantly and as a relief organized the first church of their own denomination. The movement flourished for the next ten years as did the sentiment against the ownership of slaves, and since then has stood, like all other denominations upon its intrinsic merits as a branch of the general church.

Such were the diverse beginnings of Chicago from an ecclesiastical point of view. It would be impracticable within the space of this chapter to follow, step by step, the church growth of this city, but having pointed out the pioneer stage of the different denominations which gained a foothold in the early years of Chicago, it only remains to give some idea of the growth to which Chicago has now attained in its religious development.



BEDFORD BUILDING.

A stranger visiting Chicago is likely to be surprised at not seeing any churches in the central, or down-town, portions of the city. In the earlier days of Chicago churches in the business district were comparatively numerous. As the city grew, some of these were removed up-town, the better to accommodate the people. In the great fire of 1871 all that were left were swept away. The scattered, and for the time impoverished, members found it necessary to rebuild elsewhere nearer their own new homes. Now, between the lake on the east and Halsted street on the west, and between Chicago avenue on the north and Twelfth street on the south, there are scarcely a dozen churches of all denominations.

The number of churches and missions owned by the various denominations and sects is constantly growing. At the beginning of 1905 their strength was as follows:

Denomination.	Churches.	Missions.	Estimated Membership.
Adventists	10	...	525
Baptists	72	14	22,000
Christian	22	8	2,800
Congregational	81	14	21,000
Christian Catholic	9	....	450
Christian Scientist	6	....	1,500
Latter Day Saints	4	....	200
Cumberland Presbyterian	5	....	900
Dunkards	1	1	75
Episcopal	48	7	10,500
Episcopal Reformed	8	....	2,500
Ethical Culture	1	...	900
Evangelical Association	13	....	9,200
Evangelical Lutheran	119	23	45,000
German Evangelical	27	....	1,500
United Evangelical	6	1	1,200
Free Methodist	7	...	900
Greek	2	...	400
Holland Christian Reformed	5	....	500
Independent	9	....	2,200
Jewish	37	....	7,500
Methodist	147	2	40,000
Methodist Protestant	1	....	100
Swedenborgian	5	....	525
Presbyterian	52	12	1,500
Reformed Church	15	1	2,300
Covenanter	1	...	150
Catholic	277	49	1,200,000
Independent Polish Catholic	6	....	2,500
Salvation Army	....	24	5,000
Unitarian	5	....	1,000
United Presbyterian	7	....	1,000
Universalists	4	....	500
Volunteers of America	...	12	1,500
Miscellaneous	9	8	2,000

The number of churches and missions by no means represents the activities of the various religious societies. Schools, convents, hospitals and other institu-

tions are included in the good work that is being done and is constantly on the increase.

Every ordinarily live and enterprising church has, besides its Sunday-school, numerous associated educational agencies. Moreover, many of the churches have their own parish schools. Nearly all the denominations have their own theological seminaries, and several of these are richly endowed and of national importance. One of these is the Chicago Theological Seminary (Congregational), on Ashland boulevard, at Union Park. The Presbyterians have their McCormick Theological Seminary, which the C. H. McCormick family founded and have done so much to enrich; their Presbyterian Hospital and the Lake Forest University. The latter, though located a few miles north of the city, is in fact a Chicago Presbyterian institution.

The Methodists have their great Northwestern University, with its Garrett Biblical Institute, at Evanston. The Baptists have their University of Chicago, which already has property and endowment of about $10,000,000. Although many of the munificent gifts for its buildings and endowments have come from members of other religious organizations, the majority of its trustees must always be members of the Baptist church.

It is moreover necessary in this connection to make mention of the strong denominational press of the several leading denominations. The Baptist Standard, of which Mr. Edward Goodman and the Rev. Dr. J. A. Smith were respectively publisher and editor for over forty years, still stands as one among the best periodicals of the denomination. The Congregational organ, The Advance, which was started in October, 1867, and has numbered among its editors such men as Dr. W. W. Patton, Gen. Charles H. Howard and Dr. Simeon Gilbert, still keeps its lead as the representative paper of its denomination. The Interior is considered the leading journal of the Presbyterian denomination in America. It was started through the influence of the late Cyrus H. McCormick two years after The Advance. Dr. W. C. Gray has been its editor ever since 1871, and it may be said of him that he has few superiors in the line of editorial work in this or any other country. The Northwestern Christian Advocate, as the organ of the Methodist church, is also among the best publications of its kind. Dr. Arthur Edwards, the editor for over thirty years, has been one of the most able and popular men in the denomination. All these with the Living Church (Episcopal), the Catholic World and many other denominational journals, very ably represent the religious influences of the city.

Taken as a whole, the churches of Chicago have from the first shared abundantly in the vigilant and outpushing enterprise characteristic of Chicago. Their influence in many ways has not only penetrated and influenced the life of the city, but has gone out into all parts of the country tributary thereto.

UNION PARK.

CHAPTER XV.

CHICAGO PARKS.

CHICAGO at the beginning of her second century is planning the greatest park system in the world. For its fulfillment we have the assurance born of an energetic past and an awakened civic pride conscious of its obligation to the future.

Starting with the present park area of 3,174 acres, this stupendous plan contemplates the bringing of more than ten times that amount of park lands into a great system of pleasure grounds, which will entirely girdle the Chicago of the future and put a playground almost at the door of every man, woman and child of the great metropolis of the West, be they rich or poor, dweller of mansion or tenement.

The general plan of Chicago's great park extension plan can be divided into three distinct enterprises:

First, the establishment of internal parks in the densely populated section within the area bounded by the present park system and Lake Michigan. This enterprise comprehends the erection of neighborhood-center buildings and the improvement of Grant Park to five times its present size. The present large parks and boulevards are considered sufficient for the territory immediately contiguous to them, with the exception of Lincoln Park, which is to have an extensive addition.

Second, the establishment of an outer belt of forest and meadow tracts connected by parkways, which would encircle the future city of Chicago after its suburbs to the north, south and west had come into its corporate boundaries.

Third, the boulevarding of the east edge of the city along the lake shore for its entire length, except where parks and boulevards already exist.

When this system is a reality Chicago will take its place at the head of American cities in park area and applied facilities and for artistic attractiveness rival the beauties of Paris.

The beginning of Chicago's park system was Dearborn Park, now the site of the Public Library, created in 1839. As the city grew for the next twenty years no systematic plan for parks was adopted. Small areas were set aside and improved, among them being Washington Square on the North Side, Jefferson, Union, Vernon and Wicker parks on the West Side, and Ellis, Douglas Monument, Woodland and Groveland parks on the South Side. Of these none but Union Park comprised more than five acres. The latter contains but seventeen acres. In addition to these, thirty-four other small areas, many of them mere triangles at street intersections were created into parks.

The real beginning of Chicago's great system of parks and boulevards was in 1860, when an agitation was started urging the city to devote a tract of fifty-nine acres between Webster avenue and Menominee street, and Clark street and the lake for park purposes. This land had been secured by the city eight years before on account of emergencies arising from an epidemic of cholera. The land was intended to be used as a cemetery, hospital grounds and quarantine station. The cost of the fifty-nine acres was $8,851.50. The cemetery was used as a place of burial until 1866, and the hospital was not torn down until 1870. The rapid growth of the North Side soon showed that it would be necessary to do away with a burial ground so near to the center of the city, and, because of the agitation of the citizens and physicians, the sale of burial lots was stopped in 1859. In the following year the city council passed an ordinance reserving the north section of the cemetery for park purposes. For several years little was done toward laying out a park, and it

was left a stretch of sand waste, with scattering thickets of scrub oak and willows. A few walks were built and it began to be known as "the park." Definite action by the council took place in 1864, when an ordinance was passed declaring that this property should be set aside as a public park to be known as "Lake Park." The next year the name was changed to "Lincoln Park," and an appropriation of $10,000 made for its improvement. A landscape gardener was employed and drives and walks were laid out and trees planted. Less than half the appropriation was used up the first year.

Slow progress was made until 1869 when the citizens of the North Side joined with the citizens of the South and West sides in securing the needed legislation at Springfield for establishing park districts and commissions as separate taxing and governing bodies. These commissions proceeded in an orderly, systematic way to establish the present magnificent chain of connected parks, which has placed Chicago in the front rank of American cities in park facilities. This chain includes Lincoln Park on the North Side, Humboldt, Garfield and Douglas parks on the West Side and Washington and Jackson parks on the South Side, with their connecting boulevards. Two more parks were recently added to this chain along Western Avenue boulevard, McKinley Park at Thirty-seventh street and Gage Park at Fifty-fifth street.

The park area after the establishment of these parks in 1870 was 1,887 acres. In the next ten years it was increased to 2,000 acres and remained at that figure until 1900, when the great movement for the establishment of the most comprehensive park system in the world was started. As a result in a few years the area had grown to 3,174 acres, embracing eighty-four parks and the boulevards connecting them are thirty-four in number and fifty miles long.

LINCOLN PARK.

Lincoln Park as it is to-day was made possible by the passage of the first park act, February 8, 1869. This act appointed E. B. McCagg, John B. Turner, Andrew Nelson, Joseph Stockton and Jacob Rehm, commissioners of Lincoln Park. They were to serve for five years, or until their successors were selected by the judge of the Circuit Court of Cook County. This last provision of the law was subsequently changed so that commissioners are now appointed by the governor. The first board met with many obstacles. Law suits were instituted against them and they were harassed in many ways. They took in the cemetery grounds to the south of the original tract and all the bodies buried there were ordered removed and interred at various other cemeteries in the vicinity of the city.

With its connecting boulevards Lincoln Park now embraces 409 acres. An increase of area is to be made to the north along the Lake Shore which will add several hundred acres and give it another mile of shore line in addition to its present four and a half miles of water front. One million dollars are available for this purpose. No other large park in the city is so advantageously situated and so easily reached. As a result it is the most popular playground in Chicago, and immense crowds enjoy its beautiful drives, walks, shady meadows and lawns, and picturesque lagoons. It contains a magnificent collection of statuary, the heroic figure of the martyred president from whom it received its name, and that of General Grant being the most striking.

The horticultural features of Lincoln Park are especially attractive. The old English garden is a most delightful place to loiter in on summer days, and its floral displays are unrivalled. The propagating houses are new and extensive, and its greenhouses, ferneries, and palmhouse can hardly be surpassed in this country.

The pride and distinctive feature of Lincoln Park, however, is its "zoo." In the cages and enclosures are confined one of the best and most instructive collections of animals in America. There is a herd of buffaloes that has steadily increased until it has completely outgrown the five-acre range provided for it. All the great fauna and bird families of the globe are represented, and are the delight and wonder to armies of boys and girls, as well as the adult population of the entire city.

The Lincoln Park board has $500,000 available for the purchase of small parks, and negotiations are now under way for their purchase. These will be equipped with neighborhood-center houses and made as attractive and beautiful as the means at hand permits. Unlike the other sections of the city, the North Side has its great park so located that it is accessible to the most crowded part of its territory, and its lake shore is not cut off as it is on the South Side by the Illinois Central tracks.

THE SOUTH PARKS.

The act for the appointing of the South Park commissioners was passed by the legislature in February, 1869, and on the 23d of the same month Governor Palmer named John M. Wilson, Chauncey Bowen, George W. Gage, L. B. Sidway and Paul Cornell, to take charge of carrying out the provisions of the law. They had large ideas as to what the parks of the South Side should be, and the magnificent stretches of Washington and Jackson parks with their connecting boulevard bear evidence of their foresight. An issue of $2,000,000 bonds was floated and with the proceeds about 1,500 acres of land were purchased.

The first work of improvement was begun, on what is now Washington Park. Landscape architects were employed and plans for laying out the park submitted. During the next two years great progress was made until the great fire in 1871 caused a suspension of the work for about a year. In 1872, however, the public spirit of the South Side was aroused and a public movement for the improvement of the parks was begun. The commissioners were short of funds, and under the existing conditions hesitated about offering another bond issue. They called upon the citizens for assistance and the response was enthusiastic. Contributions were also solicited abroad, and plants and seeds in abundance came from the botanical gardens of Europe and Asia. Greenhouses were erected and the grounds plowed and fertilized. Lakes and lagoons were excavated, and before the close of the '70s 1,057 acres had been improved in Washington and Jackson parks. By 1884 all the floating debts of the parks had been paid, the special assessments for park purposes on the South Side, up to that time, amounting to $4,709,632.

Jackson Park will always be remembered as the site of the Columbian Exposition. For this purpose the commissioners turned over 666 acres, including the stretch along the Midway Plaisance. The wonders that were worked there in the course of the next year will never be forgotten, though the White City has vanished, and all the magnificent structures except the crumbling art palace, now occupied as a temporary home by the Field Columbian Museum, have vanished. This structure and the German building were the only reminders of the World's Fair left in two years, and the park has been fully restored.

No park in Chicago has such magnificent vistas as Jackson Park. Its driveways are laid out on magnificent lines, and its stretches of meadow and lawns are highly artistic and restful. Against it cannot be brought the criticism, that has been made against some of the other parks of Chicago, that it is overdeveloped. With a magnificent water front, its beauty is further enhanced by an extensive system of lagoons in the center of which is the "Wooded Island," where are still the quaint tea houses of the Japanese exhibit at the World's Fair. Its rose garden is a spot of surpassing beauty and interest. It has excellent golf links and many tennis courts. The total area of these parks and their boulevards is 1,500 acres.

GARFIELD PARK.

Grant Park on the Lake Front is being enlarged to five times its present size, and will become the site of the Field Columbian Museum and the Crerar Library.

CROQUET GROUNDS—GARFIELD PARK.

For this and other improvements recent enactments by the legislature make $2,000,000 available to the South Park board.

The South Park commissioners were the first to act under the statute of 1903, which gave them the authority to purchase sites for small internal parks, in the crowded residence districts. In many of the quarters a blade of green grass was a novelty. With the $1,000,000 immediately available they purchased fourteen parks, located as follows: Bessemer Park, Eighty-seventh and Lake Shore tracks in South Chicago; Cornell Park, Fifty-first, Lincoln, Wood and Fiftieth streets; Davis Square, Hermitage, Marshfield, Forty-fourth and Forty-fifth streets; Hamilton Park in Englewood, Seventy-second and the Rock Island tracks; Hardin Square, Twenty-fifth and Wentworth avenue; Palmer Park, One hundred and eleventh street and Indiana avenue; Russell Square, Eighty-third and Houston streets; Mark White Square, Twenty-ninth and Halsted streets; Armour Square, Thirtieth and Shields avenue; Marquette Park, Seventy-first and California avenue; Ogden Park, Sixty-seventh and Centre avenue; Sherman Park, Garfield boulevard and Centre avenue; Calumet Park, Ninety-fifth street and the lake in South Chicago, and an unnamed park at Forty-sixth and Stewart avenue.

The commission had started out to provide simple parks, but the conditions showed that such places to be serviceable to the city where seventy per cent of the people live in contracted quarters, must be more than breathing places with flowers, grass, trees and perhaps a pond and fountain. So its was decided to equip them with gymnasia, libraries, baths, refectories, club rooms and halls for meetings and theatricals, making them a rallying place and center of interest and inspiration for the betterment of the condition of the people of the district. Following out this idea their improvement was begun. Each park is being equipped with a field house or neighborhood-center building. This contains a gymnasium for women and girls, provided with apparatus, shower bath, plunge bath and lockers. A similar gymnasium is provided for men and boys. At the refectories wholesome foods are sold at first cost. Club rooms, where meetings of athletic clubs, sewing guilds and other organizations are held, and an assembly hall are also provided in each field house. These vary in size, in accordance with the neighborhood served, from a seating capacity of 1,000 to 3,000.

These field houses are of artistic design and constructed mainly of cement and concrete.

THE WEST PARKS.

The West Park system had its real beginning by the enactment of the legislature which established the parks of the two other great divisions of the city. The first

board appointed in February, 1869, was made up as follows: Charles C. P. Holden, Henry Greenebaum, George W. Stanford, Eben F. Runyan, Isaac R. Hitt, Clarke Lipe and David Cole. The new board was authorized to expend $400,000 for the purchase of land for a boulevard and park sites in the districts in which are now located Garfield, Douglas and Humboldt parks and their connecting boulevards.

The great fire followed by the panic of 1873 were hardships the first board had to contend with, but they were all overcome successfully. The work progressed favorably until 1877 when a scandal, growing out of charges of mismanagement, brought about a reorganization of the commission. Again in 1896 the West Park system received a hard blow by the defalcation of its treasurer, which left it clipped financially. This was met by remedial legislation at Springfield, and under new management the parks have made greater progress than ever before. The park board at this time also changed its attitude towards the city streets adjoining or running through park property by deciding to co-operate with the property owners in improving these thoroughfares, and not saddling the entire cost on the abutting property owners. This has resulted in greatly improving these thoroughfares, and has attracted to them many handsome private residences, which had been kept away because of the unfavorable conditions governing their improvement.

Garfield Park, the most highly improved of the larger parks, covers 188 acres, lying four miles directly west of the city hall. It was formerly known as Central Park, the name being changed in memory of President Garfield. Madison and Lake streets divide it into three parts, each of which has been distinctively developed. That portion north of Lake street is sparsely wooded with rolling, winding roadways and shallow brooks, in close imitation of New England farm lands. The area south of Madison street has been given over to an elaborate system of drives and promenades, twining about a massive marble band-stand, and splendidly equipped cycling and trotting courses. The central portion is ornately laid out, yet so closely has nature been followed that it is difficut for the visitor to detect in the winding lake, the sloping lawns and nodding trees any trace of the handiwork of those who have built a beautiful rural scene upon what was a stretch of level prairie.

To the north of Garfield Park is Humboldt, and to the south Douglas Park, the three connected by the boulevard planned in 1869. Humboldt is the largest of the West Side parks, and contains 206 acres, while Douglas contains a few acres less than Garfield.

Humboldt Park has a fine lake covering twenty-three acres, a new boathouse and its beauty is greatly

VIEW—WEST CHICAGO PARK

enhanced by lily ponds, magnificent driveways and walks. It has a thoroughly equipped hothouse and in connection with this is an extensive nursery containing thousands of trees and shrubs, embracing no less than 1,200 distinct varieties. It is named after the great German naturalist, Alexander von Humboldt, and is bounded by Augusta street, Grand, Kedzie, California and North avenues.

Douglas Park is named after Lincoln's great adversary. It is divided by Ogden avenue, and much of the section lying to the south has been only reclaimed from its natural state during the past five or six years. By co-operating with the drainage board the park commissioners secured many improvements at a low cost. An immense quantity of dirt needed for filling in the park and the Southwest boulevard was secured from the canal commissioners, and they were in turn granted concessions in the construction of the bridge over the canal at the boulevard crossing. In this way the park was improved in less than a year to an extent that would have taken a decade to accomplish under ordinary conditions. The lake at Douglas Park is over twenty-six acres in extent, and is the largest on the West Side. Lily ponds, bridges, conservatories and other improvements have made Douglas Park one of the most attractive pleasure grounds in the city.

McKinley Park and Gage Park, the one at Thirty-seventh and the other at Fifty-fifth street and Western Avenue boulevard have recently been added to the magnificent chain of West Side parks, and are being rapidly improved. In addition to this chain of greater park areas there are six smaller breathing spots, which have been turned over from time to time to the West Park commissioners. These are Union, Jefferson, Vernon, Wicker, Campbell and Shedd's parks. Twelve boulevards are now included in the West Park system. They are Humboldt, Central, Douglas, Southwest, Washington, Jackson, Ashland, Twelfth street, Ogden, Central Park, Homan and Oakley. All the boulevards, with the exception of Southwest are lighted with electricity, which is furnished by the lighting plant of the West Park system.

UNION PARK.

The West Park board has done nothing towards establishing small neighborhood parks as yet. It has $1,000,000 available for this purpose, but is waiting for certain questions as to the legality of the bond issue to be settled before issuing the securities.

THE MUNICIPAL PLAYGROUNDS.

The beginning of the present movement in Chicago to enlarge its park facilities first took form in 1900, when the city council appointed a commission known as the Special Park commission, to investigate and report on the conditions in the congested districts of the city, as to what could be done to provide a remedy. In the few

years of its existence this commission has done much practical work in establishing playgrounds in addition to bringing prominently to the attention of the public, the need of Chicago at once engaging in an extensive scheme to enlarge its park area on a plan consistent with its present size, and with a view to providing facilities for its great future growth. In this work the Special Park commission has performed a service of incalculable value. The nine municipal playgrounds established and maintained by the city are located as follows:

Webster ground, Thirty-third street and Wentworth avenue; Moseley ground, Twenty-fourth street and Wabash avenue; Holden ground, Bonfield and Thirty-first street; McLaren ground, West Polk street near Laflin street; Jones ground, Plymouth place, south of Harrison street; Orleans ground, Orleans street and Institute place; Northwestern Elevated Railway ground, Larrabee and Alaska streets; Adams ground, Seminary avenue near Center street; Lincoln ground, West Chicago avenue near Robey street. Some of these grounds are owned by the city, while others are donated for this use by individuals. The city spends annually $20,000 a year to maintain them. They are equipped with swings and other outdoor apparatus for gymnastic exercises, and are in charge of a competent athletic director, assisted by a policeman, and in the summer by a trained kindergartner. A superintendent, who donates his services to the cause has a general direction of the playgrounds. The children of the neighborhoods in which these playgrounds are located are greatly benefited and kept from the streets. As a practical work in improving the citizenship of the coming generation no work undertaken by a municipality is productive of greater results than this. It offers a field for public spirited citizens of means to do a lasting good by donating grounds for these bright spots in the lives of the children of the tenements.

CHICAGO'S GREAT PARKS OF THE FUTURE.

Thirty-seven thousand acres of parks is the dream of Chicago's greatness for the future. The Metropolitan Park report submitted by the Special Park commission outlines this stupendous undertaking. Henry G. Foreman, former president of the South Park commissioners and of the Outer Belt Park commission thus takes a look into the future: "Grant Park is the axis of the inner and outer belts of parks and boulevards. In it are the buildings of the Art Institute, Crerar Library, and Field Columbian Museum. From Grant Park as the hub, the system expands in the form of half a wheel. The diagonal city streets are the spokes; the inner belt of parks and boulevards is the support of the spokes; the outer belt of preserves and parkways is the tire; and the inner and outer systems are merged into the broad shore boulevard. All parts of the great recreation area are accessible quickly by transportation lines at low fares. When this system is a reality, Chicago will take its place at the head of American cities in park area and applied facilities. It will then be the Paris of America for artistic attractiveness."

The sites for this outer park belt as outlined by the report of the special commission follow:

1.—A three-eighths mile strip along the north line of Cook County from Lake Michigan to the Skokee, an ancient back bay now a marsh in springtime and prairie in summer, thence south and west embracing all of the Skokee within Cook County for a distance of about sixteen miles, terminating in the Peterson woods at Bowmanville and covering an area of 8,320 acres.

2.—A strip along the Evanston drainage canal through the northeast section of the city to the lake. This strip might be widened in certain places to make beautiful residence parks with lagoons in the center.

3.—By country drive along the north county line from the Skokee to the Desplaines river; thence south through Wheeling, Desplaines, Franklin Park, River Forest and Riverside to the Drainage Canal, a distance of twenty-five miles, covering an area of 8,800 acres.

4.—A strip running west along Salt Creek from Riverside to Western Springs, thence south along Flag Creek, or the high ground one mile east, to Willow Springs.

5.—The highlands and forest at Mt. Forest and Willow Springs, the north half mile of the hills of Palos, and the intervening Sag Valley, are recommended for a great forest reserve and city camping ground. There are 7,360 acres in this tract, and it differs from the others in that it is not long and narrow, but is nearer an oval in shape.

6.—A parkway along the proposed South Chicago Drainage Canal from the main canal to Blue Island. Thence along the Calumet river to Lake Calumet, and all around the latter, including about 1,500 acres south of the lake; making a park of nearly 3,000 acres of land and as much more of water in the midst of one of the greatest manufacturing centers in the world.

7.—The Hyde Park Reefs in the lake form a menace to navigation and it is proposed to cover them with spoil from the drainage canal banks or from subways, so as to make island parks. Similar treatment should be given the submerged land along the lake shore from Jackson Park to Grant Park. The Illinois Central cannot be moved, but the shore can be and thus restore it and the lake to the people and preserve and embellish our best known "natural feature"—the lake—for posterity.

CHAPTER XVI.

CHICAGO'S NEWSPAPERS.

HE first newspaper printed in Chicago bears the date of Tuesday, November 26, 1833. It was called the Chicago Democrat and had for its motto Franklin's splendid aphorism, "Where Liberty Dwells, There Is My Country." The pioneer journalist of the city was John Calhoun, who came west for the purpose of starting a paper in this village. He was a sturdy admirer of Andrew Jackson. Having the field all to himself, his paper was the official organ of the town. His monopoly was not long enjoyed. In the summer of 1835 a Whig paper, the American, was established by F. O. Davis. Neither of these newspapers' founders had any very considerable career in the profession. The first citizen of Chicago to make himself a power in journalism was John Wentworth, one of the most unique characters in the early history of the city. He came here fresh from Dartmouth College, and soon bought out Mr. Calhoun. His original intention was to be a lawyer, but he found journalism suited to his taste. He was an ardent Democrat, with an aptitude for politics. As a writer, he had a biting wit, pungent personal paragraphs being his forte. For a long time he had associated with him Joseph K. C. Forrest, also a pungent writer, but a man of varied gifts, writing fluently and often brilliantly on all current topics. The Democrat became a morning daily just before the presidential campaign of 1840. It continued in existence and under Mr. Wentworth's control until its discontinuance in 1861, going out of existence just as the era of newspaper prosperity was about to begin. The name Democrat was used to the end, but with the organization of the Republican party Mr. Wentworth espoused the Republican cause.

The American, and a little later the Express, had each a short and inconsequent existence, but the Chicago Daily Journal, called later the Evening Journal, which was started April 22, 1844, still lives. It was really, but not nominally, started by Thurlow Weed and a small coterie of close friends of William H. Seward for the unavowed purpose of promoting the presidential ambition of that great statesman. Mr. Richard L. Wilson, who as a young man was well known to Mr. Weed, became its editor. He was often, and deservedly, called the Prentice of the Northwest. His paragraphs were models of keen wit. Between Wentworth and Wilson was kept up a runnning fire of lampoonry. There was no real malice in their warfare. Their sharp thrusts contributed much to the enjoyment of the community. Mr. Wilson died in 1850, when his brother, Charles L. Wilson, who had been associated with him for several years succeeded to the editorship, which he retained until his death, more than twenty years later. The Journal remained true to Seward, even though Mr. Wilson was a warm personal friend of Abraham Lincoln. Mr. Lincoln's friendship for the editor was, however, unshaken. The Journal was a very influential and profitable newspaper so long as it remained Republican in politics. The managing editor for many years, Andrew Shuman, was elected lieutenant-governor in 1876 in recognition of the service rendered to the party by the Evening and Weekly Journal. The Journal continued under the control of the Wilson family until the year 1895, when John R. Wilson, a nephew of the founder of the paper, sold the controlling interest to James E. Scripps and others of Detroit. Mr. Wilson, at the time he sold, had been in control of the Journal for several years and had continued to conduct it as a Republican newspaper. The new purchasers, however, at once changed it into an independent paper of a sensational character. The change lost it many of its old subscrib-

ers, but eventually largely increased its subscription list. The management continued in control of the Journal with varying success, until the summer of 1904, when its control was purchased by John Eastman, a veteran Chicago newspaper man. His long experience in all departments of active newspaper work in Chicago and New York has been of great advantage in reviving the paper's business and editorial prestige.

Numerous newspapers of a mushroom growth sprang up in the forties, some of them dailies, but only two gained a permanent foothold, the Chicago Daily Tribune and the Staats Zeitung. The first number of the Tribune was issued July 10, 1847. To Mr. Forrest, so long the able assistant of Mr. Wentworth, belongs the honor of being the most prominent of its founders, but his connection with it was brief. Many changes were made in a few years. In 1853 Mr. Joseph Medill came to Chicago from Cleveland, and became part owner of the paper and one of its editors. Soon after Dr. C. H. Ray and William Bross became associated with him, and for some years those three eminent journalists were co-editors, with neither paramount in authority. Dr. Ray was an accomplished and brilliant writer, elegant in diction and ardent in temperament. The great triumvirate worked together harmoniously, albeit each man was of pronounced individuality. With them was associated as publishers Mr. Alfred Cowles. All four except Dr. Ray, continued their connection with the paper until death, and for nearly a quarter of a century Mr. Medill was editor-in-chief, and enjoyed the distinction of being the dean of Chicago newspaper men. At his death, early in 1899, he was succeeded by Robert W. Patterson, long the managing editor of the paper.

The Staats Zeitung was started in 1848, and was the first Chicago newspaper of importance printed in the German language. The first editor to achieve fame was Captain George Schneider, who came to Chicago from St. Louis in the summer of 1851 to assume the editorship. He made the Staats Zeitung a daily of great power. Being a strong advocate of freedom in all its breadth of meaning, Captain Schneider was one of the founders of the Republican party. During the Know-Nothing craze he rendered great service to the country, saving the Republican party from alliance with it. He retired from the work on the Staats Zeitung to accept a lucrative position under President Lincoln. He was succeeded by two strong men, A. C. Hesing, as publisher, and Herman Raster as editor. With Mr. Raster to wield the pen and Mr. Hesing "to do politics," the paper was for about ten years one of the greatest powers in Republican politics in the West. They broke from the party in 1876, and afterwards the paper was independent in politics. Being published in the German language it suffered from the fact that American born Germans naturally drift away from the language, both spoken and written.

Washington Hesing succeeded to the property at the death of his father. He was prominent in Democratic politics, and was postmaster and independent candidate for mayor before his death. After his death the Staats Zeitung property gradually declined until a few years go it was absorbed by the Freie Presse. While it is published under his own name as the morning edition of the Freie Presse, it has lost much of its old individuality. Both papers are under the control of Richard Michaelis, as the head of the Illinois Publishing Company.

The next important newspaper of Chicago in chronological order was the Daily Times, founded in 1854. From the beginning it was strongly Democratic in politics. Four years later another Democratic morning daily was started, called the Herald. The Times was a Douglas organ, the Herald a Buchanan organ. Both ran until 1860, when Cyrus H. McCormick, proprietor of the Herald, bought the Times and merged them under the name of the Herald-Times, the intention being to drop the latter name. The next year, however, Wilbur F. Storey bought out McCormick, and, not carrying out the intention of the former proprietor, dropped the Herald and retained the name of the Times. Under the editorship and management of Mr. Storey the Chicago Times entered upon a great career as a newspaper. Mr. Storey was a strong and daring character, and devoted himself to building up the Times with a reckless disregard for morals and religion. He had a genius for newspaper work, and with enterprise unprecedented at that time used the telegaph to collect news from all portions of the country, especially those portions tributary to Chicago. Sensational and salacious matter was given special prominence and the paper increased rapidly in circulation and held an important place until the failure of Mr. Storey's mind and his eventual decease. After that it had an uncertain life, appearing a great deal in the courts, where various people were trying to get possession of what remained of it. It lived a sickly life, however, until about the close of 1894, when it suspended publication and became a part of the Herald, under the name of the Times-Herald.

The Chicago Daily Herald was started in 1881 by Frank W. Palmer and some other Republican politicians, together with a few aspiring young journalists, with James W. Scott as publisher. It had a trying sort of existence for a few years until John R. Walsh joined with Martin J. Russell and James W. Scott, purchased it and put it on its feet. Mr. Russell was the editor and Mr. Scott the publisher. It proved a great success. Typographically it was the handsomest paper printed in Chicago, if not in the United States. It grew rapidly in favor as an independent Democratic paper, and event-

ually took position as the leading organ of the party. Late in 1894, Mr. Russell having some time before ceased his connection with the paper, Mr. Scott and a syndicate of gentlemen purchased Mr. Walsh's interest, at the same time purchasing what remained of the Chicago Times, and consolidated the two papers as the Times-Herald. The new parties that came into the deal were led to do so by their confidence in Mr. Scott's ability as a publisher and manager. That gentleman, however, very suddenly died in April, 1895, before he had secured any of the fruits of his great work. The Evening Post, an afternoon paper that had been started by the Herald and published as an afternoon edition, was also a part of the Times-Herald property. On the death of Mr. Scott both papers were sold to H. H. Kohlsaat, who at once changed the papers from Democratic organs to independent papers with Republican leanings. This was in 1894. Mr. Kohlsaat started under the most auspicious circumstances to manage these great properties, but his lack of training in the newspaper business soon became manifest in the guidance of the Herald and Post. He was compelled to relinquish his control of the Post several years ago and in 1903 practically ceased to be a factor in the management of the Times-Herald. A consolidation of the Record and the Times-Herald was brought about in the spring of 1901 as a means of saving the Herald and also conserving a large financial interest that Victor Lawson, publisher of the Record, had secured in the Times-Herald property. Frank B. Noyes, of Washington, later became interested and assumed control of the property, Mr. Kohlsaat retiring from an active participation in its management.

MARQUETTE BUILDING.

The Inter Ocean was the first daily newspaper born in Chicago after the great fire of 1871. The first number was published March 25, 1872. J. Young Scammon one of the pioneers of Chicago was the founder. As a lawyer, banker and philanthropist he had stood at the forefront almost ever since Chicago had a name. He had had something to do with the founding of more than one of the pioneer papers of the city, but the Inter Ocean was his individual enterprise, at least for the first few years of its existence. It was radically Republican from the beginning. The Chicago Tribune, which was the leading Republican newspaper of the Northwest having bolted the nomination of General Grant in 1872, gave great opportunity for the Inter Ocean to secure a strong hold on the party

throughout the northwest country, and being ably edited it did much toward supplanting the Tribune in Republican households. In 1875 Mr. Scammon retired altogether from any connection with The Inter Ocean, and a new company with William Penn Nixon as editor and manager, took possession of the property. Mr. Nixon continued from that time as editor-in-chief and general manager of the paper until 1897, when a controlling interest was purchased by Charles T. Yerkes. The paper continued, as it had been for twenty-five years, the ablest and most aggressive exponent of Republican principles west of the Alleghany mountains. After the purchase by Mr. Yerkes, George W. Hinman of New York, succeeded Mr. Nixon as editor-in-chief. Under his editorship the paper showed increased vigor and aggressiveness and attracted wide attention. In January, 1898, Mr. Nixon was appointed collector of customs by President McKinley, but continued as publisher of the Inter Ocean until 1902 or 1903, when the control of the paper was acquired by Mr. Hinman. Under Mr. Hinman's personal control the Inter Ocean has been a power in the political and civic activities of the city.

The weekly edition of the Inter Ocean secured the widest circulation of any political and secular paper published west of the Allegheny mountains. It is the boast of its publishers that it has subscribers in every state and territory of the Union and many foreign countries. It is especially valuable as an advocate of Republican principles, and probably exercises a wider influence in states composing the northern portions of the Mississippi and Missouri valleys than any other half dozen publications. Its popularity as a family paper added greatly to its influence politically.

The first one-cent paper published in Chicago was the Chicago Daily News. The first number was issued on Christmas Day, 1875. At first it was a paper devoted almost entirely to local matters, being entirely outside of the Associated Press, and being unable to spend much money in securing telegraphic service. In spite of all this, as a cheap evening paper, it grew in favor and early fell into the hands of Victor F. Lawson and Melville E. Stone. These men pushed it forward with great skill and energy, and by purchasing the franchise of the Daily Evening Post, which failed and was sold in 1878, it became a member of the Associated Press. From that day its forward step was rapid and until it became the greatest money-making publication west of New York. On March 21, 1881, a morning edition of the Daily News was first published. On March 13, 1893, the name of the morning edition was changed to the Chicago Record. The Lawson papers have always been of the class called independent, and support such policies and men as best please the tastes or serve the interests of their proprietor. The Record was consolidated with the Times-Herald in 1901.

When Mr. Kohlsaat purchased the Times-Herald and made it an independent newspaper it left the Democratic party without any newspaper to advocate its principles. To fill this want Martin J. Russell, former editor of the Herald, and H. W. Seymour, at one time managing editor of the Daily Times, with the aid and assistance of a prominent capitalist, started the Chicago Chronicle. From the beginning it was ably edited and grew in favor as a straight Democratic organ. It declined to follow the party in 1896 and headed the bolt of the Gold Democrats. While continuing radically Democratic, its chief characteristics are great independence in action and in the advocacy both of men and principles. John R. Walsh has been the virtual owner of the Chronicle from the beginning and his pronounced antagonism to the radical wing of the Democratic party finally resulted in 1904 in a complete change in the political policy of the paper, it coming out as an avowed Republican organ.

W. R. Hearst is the last publisher who has entered the daily newspaper field. In 1900 he started the Chicago American, an afternoon paper, along the same lines as his San Francisco and New York publications. Highly sensational in tone and make-up his paper was forced to the front with lavish expenditure of money and soon had a large circulation. A morning edition of the American was started which also achieved success from the beginning. The morning edition is called The Examiner. The papers are exponents of the radical wing of the Democratic party, of which Mr. Hearst is one of the acknowledged leaders. He has used his various newspapers to expound his own personal views and advance his own political ambitions.

In addition to the above there are several daily papers published in foreign languages. Among these the most important are: The Freie Presse, published both morning and evening in the German language. Richard Michaelis is editor and proprietor. It was at one time Republican, but later supported the Democratic party. The Abendpost, also German, is published as an evening paper. Fritz Glogaur is editor and general manager. The paper is conducted with considerable vigor and with German-Americans has considerable influence. The Skandinaven, John Anderson, editor and proprietor, is the most influential newspaper among Norwegians and their descendants of any publication in the West or Northwest. It is independent in its tendencies, but is generally with the Republican party. It is published daily and weekly.

The religious newspapers of Chicago are probably second to those of no other city of the nation. They are numerous and many of them are prosperous. Outside of the daily papers there are about 600 weekly papers—

[illegible] [illegible] [illegible] [

absolute control of the paper as general manager and editor from 1875 to 1897.

In May, 1891, Mr. Nixon sold a large block of stock to Mr. H. H. Kohlsaat, and the latter became publisher of The Inter Ocean and manager of its finances and business. May 3, 1894, Mr. Nixon repurchased the stock held by Mr. Kohlsaat and was in complete control of the paper until July, 1897, when a majority of the stock was sold to Mr. Charles T. Yerkes. The change in ownership was announced November 18, when Mr. George Wheeler Human of the New York Sun became editor-in-chief and manager of the paper. Under the new arrangement Mr. Nixon continued as publisher. In announcing the change in ownership, on November 21, 1897, The Inter Ocean said:

"The Inter Ocean appears to-day for the first time under the active management of its new owners, and it will endeavor to maintain the high standard long adhered to in its columns.

"It will give special attention to literature, politics, art, sciences and the welfare of this city. It will oppose the Chicago newspaper trust, whose evils it recognizes and whose abuses it has experienced. It will advocate giving to all newspapers who desire it Associated Press news and any other news which it will be desirable for the people to have.

"It will take special care that this news shall be truthful; that facts only beneficial to the people shall be printed, and it will oppose and expose false and sensational articles, which are used so generally nowadays for catch-penny purposes.

"It will combat falsehood and hypocrisy wherever they are exposed, whether in a newspaper, a public office, or a pulpit. It will criticise public officials fearlessly and fairly, but the sancity of the home will be recognized and private character will be respected.

"It will be loyal to the principles of the Republican party and will fight to retain them intact against the assaults of socialists, anarchists and their allies in the Democratic party. It will defend at all times the system of protection and the gold standard, the bulwarks of our prosperity. It will be an unwavering advocate of a strong, though pacific, foreign policy, and will never surrender a point of national honor.

"It will assist in building up Chicago and in showing to the world the advantages of the coming metropolis of the continent. Its columns will not be in the service of any man or party who would use them for selfish ends, and its policy will be straightforward, independent and courageous, without fear or favor."

Carrying out its own idea in regard to the news business, the management of The Inter Ocean sought every available source for the collection of news. The only prominent newspaper in the country that was not in the power of the Associated Press was the New York Sun. The managers of the Associated Press had tried in every way to induce the management of the Sun to join it. When, however, all their importunities failed

REAPER BLOCK

they pronounced the Sun "antagonistic" and forbade any of its members from buying of or selling to the Sun. The foreign news at that period was very important. To supplement the Associated Press news the management of The Inter Ocean made arrangements for the purchase of the foreign news of the Sun. As soon as they learned of this action there was a great hubbub among the officials and managers of the Associated Press and The Inter Ocean was warned to cease having any dealings with the Sun and to publish no more of that paper's foreign or domestic news, threatening it with deprivation of the Associated Press Anyone at all familiar with newspaper work will know that at that time of night and at that time of week was he very worst period at which such acion could have been taken. But for the fact that several wires from the New York Sun office were placed at the service of the paper, The Inter Ocean, on Sunday morning, must have made a poor showing to its readers. As it was, however, the absence of the Associated Press news was hardly missed.

At that time an Associated Press franchise in Chicago was considered worth at least $100,000, and it is doubtful if one could have been purchased at double that

DOUGLAS PARK GREENHOUSE.

news and expulsion from the association. To prevent this, The Inter Ocean began a suit to enjoin the Associated Press from carrying out its intention to cut off The Inter Ocean's news service. The case was fully argued before Judge Waterman of the Circuit Court. While he refused to grant the injunction, he pronounced the By-Law under which the officers of the Associated Press took this action illegal and the contract based upon it void. This decision was rendered Friday, March 4, and, though notice of appeal was given, the Associated Press, without any notice or warning, at midnight, Saturday, March 5, 1898, suddenly and unexpectedly stopped serving news to The Inter Ocean. sum. It was thought by many, both inside and outside the Associated Press, that no newspaper could live without that service, and, in fact, had not The Inter Ocean had the money to buy and the energy and determination to collect the news, the action of the Associated Press management would have proved disastrous. As it was, in alliance with the New York Sun, it built up a news service for itself different from that published by the other Chicago newspapers, and by many of the best judges considered very superior to any of them.

Recurring to the suit, the Appellate Court affirmed the judgment of the court below. The case was then taken to the Supreme Court of the state, and after nearly

two years from the time of the beginning of the first suit, the judges of the Supreme Court sent down a unanimous decision, which sustained every position of The Inter Ocean, declaring the By-Law under which officers of the Associated Press acted illegal and the contracts between the Associated Press and its members void. It further decided that the Associated Press was a common carrier of news and must deliver the goods without partiality to all newspapers that desired it and would pay for it. This decision was like a thunderbolt in the camp of the trust newspapers, and as it affected nearly all the important newspapers of the country, the attention of the whole world was called to this triumph of The Inter Ocean—a triumph, in fact, of a single newspaper against an organization composed of all the other papers of the country.

This decision, coming so closely on the verdict of "Not guilty" in the case of Mr. Hinman, editor of The Inter Ocean, who was charged by Mr. Kohlsaat, editor of the Times-Herald, with criminal libel on him (Kohlsaat) gave a prestige to The Inter Ocean before the people that it had never before enjoyed. In that case, like the case of the Associated Press, all the trust newspapers had combined to aid Mr. Kohlsaat in securing the conviction of Mr. Hinman, and his defeat was a practical verdict against them. The outcome of the controversy between The Inter Ocean and the Associated Press was the reorganization of the latter and the payment under decision of arbitrators of $40,000 to The Inter Ocean.

Meantime The Inter Ocean aggressively pursued the way marked out, and added to its fame as a leader in American thought. Always Republican and always American, it led in the movement for national expansion, and proved itself an able and forceful defender of the administration of President McKinley during the troublesome times of the Spanish war and the agitation over the new questions resulting from that war. Whether it was the crushing of the rebellion in the Philippines, the acceptance of Porto Rico at the hands of her people, the settlement of the troubles in Cuba, or defense of the conduct of the war, The Inter Ocean stood by the administration, fighting its battles in the name of the American people. When a conspiracy was formed to disgrace Secretary of War Alger and smirch the administration on account of the conduct of the war, The Inter Ocean was one of the few metropolitan dailies that bravely fought the combination until General Alger was vindicated. When the country was shocked—almost paralyzed—by the news of the horrible crime, the sinking of the Maine, The Inter Ocean, quick to see the results foreshadowed, said: "This is the beginning of a contest, the end of which will be the expulsion of Spain from the West Indies." Within six months these words were proved prophetic.

When the delegates to The Hague Peace Conference of 1899 were about to vote on the arbitration treaty The Inter Ocean called attention to the fact that Article 27, as submitted, was a surrender of the Monroe Doctrine and insisted that the American commissioners should be instructed to demand such modification of that article as would recognize the Monroe Doctrine. Not another newspaper in America joined The Inter Ocean in this protest against the abandonment of a traditional American policy, but President McKinley, seeing the force of The Inter Ocean's argument, instructed the American delegates to insist upon the incorporation in the treaty of a declaration which was in effect a recognition of the Monroe Doctrine. These instructions were carried out and the American declaration was accepted by the conference.

Under date of January 11, 1902, the controlling interest in The Inter Ocean was acquired by Mr. Hinman, who had been for four years its editor and manager. Under the new ownership the policy announced in 1897 was continued, the paper discussing fearlessly all the greater questions involved in the advance of the United States to a world power. It heartily supported President Roosevelt in his military, naval and foreign policies, and as usual was at the fore in the presidential campaign of 1904. In only one case did The Inter Ocean decline to support a candidate named by a Republican convention, and that was in the case of John M. Harlan, named for mayor in the spring of 1905. It acted independently in the mayoralty campaign on the ground that Mr. Harlan, having opposed every Republican candidate for mayor nominated in ten years, and having conspired to their defeat he could not be supported by Republicans. Mr. Harlan was defeated.

In the senatorial campaign of 1902, The Inter Ocean advocated the endorsement of Albert J. Hopkins for United States senator by the state convention and carried its point against the opposition of all the other Chicago newspapers. Mr. Hopkins is to-day senator.

These are but a few illustrations of the increasing political influence of The Inter Ocean. With that influence, moreover came a strong growth in The Inter Ocean's circulation, particularly in the city of Chicago, where it now is double what it was in January, 1902.

CHAPTER XVII.

CHICAGO'S CHARITIES.

HICAGO'S charities are manifold. In the rush for wealth and power the poor, the sick and the unfortunate have not been neglected. The charge might better be brought against the city and its people that in its liberality there has been more danger of demoralizing duplication in giving, than in failing to give. The city's record in this regard is as remarkable as any feature of its wonderful municipal history.

Nor should this be wondered at, since the generous manner in which the world came to the relief of a stricken city at the time of the great fire, gave Chicago a lesson in charity it will never forget. Previous to that time nothing had occurred in the city to call out anything remarkable in the way of giving. The prosperity was such, and the freedom from any great distress was so manifest, that benevolence flowed in narrow channels almost unobserved.

The first charity movement of importance was started in 1857 when the Chicago Relief and Aid Society was formed. Several other movements of the same character started shortly afterwards, which worked independently of one another, until in 1867 they were all combined under the parent society. By this centralization of the work of relief in the city much good was accomplished, for the Relief and Aid society was wholly disconnected from all the churches, the friend of them all, but the auxiliary of none. When the heavy blow fell on the city a few years later it was a great thing for Chicago that this organization existed. The emergency of 1871 found a charitable organization in operation which could not have been better adapted to afford relief and aid, had it been formed with a clear understanding in advance of what was to happen and what would be needed. The territory of the city had been divided into fourteen districts, preparatory to the winter's work of relief of poverty and destitution. This organization with its depots and equipment in the various districts was at once made use of in alleviating the distress of the destitute and homeless on account of the fire. While the fire was still burning Mayor Mason turned over to it all the contributions for charity which began to pour in as soon as the extent of the mighty conflagration became known. Leading citizens of executive ability took matters in hand, and the result was most satisfactory. There was never any scandal or suspicion of dishonesty, nor was red tape allowed to hinder the emergency work. During the first four days after the fire no less than 330 carloads of relief supplies were received by rail from neighboring towns. These goods came without waybills, or invoices, the railroads making no charge for transportation. The receiving directly from the cars and distribution to the people in need proved of the greatest benefit in minimizing distress.

Relief was supplemented in a few weeks with aid. About the first aid was assistance extended to poor women in buying sewing machines to replace those which were lost in the fire. From November 6, 1871, to May 1, 1873, the society disbursed for special relief, $281,489.03; for sewing machines, $138,855.26; for rent paid, $6,371.80; for tools bought, $10,742, a total of $437,458.09. The number of persons who applied for relief during that time was 16,299, and the applications approved numbered 9,962. But these figures give no idea of the grand total of relief and aid actually afforded. Over 20,000 persons secured employment through the agency of the society's free employment bureau. Hospitals and dispensaries were enabled to provide for the indigent sick who needed institutional relief, and many thousands of patients were ministered to in their homes. Twenty-five charitable institutions were the recipients

of nearly half a million dollars. The cash contributions received by this society from the American people was $3,846,250.36; from other countries, $973,897.80; making in all $4,820,148.16. The society gave an account of this great stewardship April 30, 1874, showing that besides these receipts and $50,000 as a special fund from A. T. Stewart, it had received $126,634.58 from the banks as interest on deposits. At the time the account was rendered the balance on hand was $581,328.66, the disbursements having been $4,415,454.08. Gradually the demands upon this society lessened. When the extraordinary needs incident to the fire were over there was still a great work to be done. That central organization continues to be a great factor in the charitable work of Chicago, but the mighty river of relief and aid flows in innumerable channels. It is impossible to enumerate them all, but some idea of this feature of Chicago's activity at the present time can be presented.

Of course, it is not possible to name, or even to accurately classify, all the charities of the city. To meet the obivious necessities of the more destitute and suffering, a very great number of institutions, associations and specific agencies have been originated. With the rapid growth of the city existing institutions and agencies soon become painfully inadequate. The older ones need enlargement and new ones have to be formed. Munificent gifts for the purpose, more than anybody knows, are constantly coming into these charitable treasuries.

Chicago's aid and relief work has been greatly systematized in recent years, a policy that has its advocates and also its critics. It assures the patrons of these organizations that their benefactions will be put where they will do the most good, and at the same time prevent a useless and demoralizing duplication. Among the charity organizations that are doing the most effective work are included the following:

Associated Jewish Charities of Chicago, Austro-Hungarian Benevolent Association, Chicago Bureau of Charities, Chicago Bureau of Justice, Chicago Medical Mission and Allied Charities, Chicago Relief and Aid Society, Chicago Woman's Aid Society, Hungarian Charity Society, Illinois Charitable Relief Corps, Illinois Children's Home and Aid Society, Societe Francaise de Bienfaisance de l'Illinois, United

MONADNOCK BLOCK.

Hebrew Charities, Visitation and Aid Society, Woman's Benevolent Association.

These cover the field with many others ably and co-operate in such a way that cases which should naturally come to them are directed to their own race or people, though these lines are not drawn except where the conditions warrant it.

At the beginning of 1905 there were in Chicago sixty-one hospitals, thirty-five dispensaries and over sixty asylums and homes. This enumeration includes only the larger institutions, and there are many smaller enterprises conducted to help the needy and unfortunate that are also doing efficient work.

The county authorities have an efficient organization which embraces the County hospital, the Dunning institutions and the county agent's relief station on the West Side. Through these avenues much distress is relieved and sick and indigent persons cared for. The county agent grants relief to those who are actually in want, provided that they have been residents of Cook county for at least six months. He also passes on applications for admission to the county institutions and provides transportation to the poor of other cities who may become stranded here.

The municipal lodging house, designed to provide shelter and food for deserving poor temporarily out of employment was opened December 21, 1901. In order that this shall not be an encouragement to the worthless, all the lodgers, able to work, are required to give three hours labor on the streets in return for lodging and breakfast. Tramps and intoxicated men are not admitted. During last year about 25,000 lodgings and twice as many meals were furnished. The city spends about $9,000 a year on this institution. In addition to this the city has appropriated $12,000 to St. Vincent's Asylum for orphans, and its emergency dispensary. In connection with the police department an efficient ambulance service is maintained.

Much to the credit of the city is the provision made for caring for the needy, dependent, abandoned, wronged and delinquent children. Among the children's institutions are the Chicago Foundlings' home, Crippled Children's home, Illinois Industrial school, Chicago Orphan asylum, St. Mary's Home for Children, St. Joseph's Provident Orphan asylum, Hull House Creche, Epworth Children's home, St. Charles Home for Boys, Newsboys' home, Chicago Home for Jewish Orphans.

No better move was ever made for the care of children than the establishment of the juvenile court as a branch of the county courts, for the purpose of caring for the "dependent" and "neglected" children. Under the act creating the court a dependent and neglected child means any child, who for any reason, is destitute, or homeless, or abandoned, or dependent upon the public for support, or has not proper parental care or guardians, or who habitually begs or receives alms, or who is found living in any house of ill fame, or with vicious or disreputable persons, or whose home by reason of neglect, cruelty or depravity on the part of the parents, guardians or the other persons in whose care it may be, is an unfit place for such a child; and any child under the age of twelve years who is found peddling or selling any article, or singing or playing any musical instrument upon any street or giving any public entertainment.

Under the term "delinquent" child is included any child under the age of sixteen years who violates any law of the state, or city ordinances. Its workings have fully justified the hope its originators held of saving the young and taking them in time before, because of vicious environment, they have developed into hardened law breakers.

In this connection mention should also be made of the Humane Society, whose vigilant ministries on behalf, not only of suffering animals, but especially of wronged and suffering children, have been eminently important alike in preventive and corrective ways.

So many are the charities of Chicago that there is constant danger of demoralizing duplication. To guard against this a bureau of associated charities was organized in 1894. Its aim and purposes are to promote such co-operation among charitable agencies, that each shall be permitted to do what it can do best, and that the field of each shall exactly fit in with the fields of others, leaving neither overlapping edges nor untouched need. A system of friendly visiting, through which those who desire to give personal service are brought into the homes of the very poor, is maintained. The theory is to investigate reports of distress and secure relief for each case of need, from the proper agencies, the bureau itself giving material relief only in emergencies; second, to guarantee adequate relief where relief is needed; third, to protect the public from imposition and fraud. It cannot be claimed that this lofty ideal has been satisfactorily attained, but wholesome and encouraging progress is being made in the solution of what must be set down as the supreme problem of municipal charity, how to so administer it as to afford the greatest immediate relief and permanent aid with the least danger of abuse.

CHAPTER XVIII.

CHICAGO'S RAILROAD SYSTEMS.

CHICAGO is the leading railroad center of the world.

In tonnage, mileage, equipment, number of trains, both passenger and freight, the great carrier systems centering in this city are unsurpassed by any other group of roads. Chicago's railroads control directly over 66,000 miles of track, or about a third of the total mileage of the United States. The lines with which they connect and which are in a great measure dependent upon Chicago for a large share of their tonnage would more than double this, so that it can be said that not less than two-thirds of all the railroad mileage in the country is tributary to Chicago.

The Union Pacific, Southern Pacific, Southern Railway, Northern Pacific, Chesapeake & Ohio, Louisville & Nashville and the trunk lines from Buffalo east, though not running into Chicago, regard this city as the destination and originating point of the greater part of their traffic. Many of them have their general traffic and operating departments located in Chicago, and not a line of any consequence in the country but maintains a commercial or general agency here.

The passenger and freight traffic centering here is the heaviest in the country. From the West and Northwest are poured the immense resources which find a gateway through Chicago to the markets of the world. So also the great traveling public of America must pass through the city, which was builded on the ancient portage at the southern end of Lake Michigan. Some idea of immensity of the tonnage handled by the railroads centering here—which amounts to over 40 per cent of the tonnage of the United States—can be gained by considering a few of the items that enter into this great traffic.

More than 16,000,000 barrels of flour are carried to and from Chicago annually by the railroads. The total rail shipments of wheat in and out of Chicago last year were over 36,000,000 bushels, of corn upwards of 123,000,000 bushels, of oats 112,000,000 bushels and of rye and barley 33,000,000 bushels. Three and a quarter million cattle are brought to Chicago annually by the railroads, and four and a half million sheep, and close to eight million hogs. The greatest part of these are slaughtered by the great packing concerns, but close to four and a half million are shipped out alive. The amount of dressed beef brought in and carried out by the railroads from Chicago last year (1904) was 1,280,000,000 pounds. The shipments alone of hog products, exclusive of those brought here by the railroads or carried through, amounted to over a billion and a half pounds.

These are a few of the items that go toward making up the tremendous freight tonnage originating in Chicago, and finding a destination here, and which requires no less than an average of 663 trains a day to carry. Equally stupendous is the passenger traffic of the Chicago railroads. Fifty-seven years ago, when the first engine with a single car started on the old Galena division of the North-Western Railroad, it consisted of a twelve-ton engine and a twenty-foot car for passengers. To-day the suburban, local and through line passenger service of Chicago requires no less than an average of 1,281 trains a day in and out of the city. These carry upwards of 300,000 passengers, and the heaviest engines for the fast runs weigh as high as 194 tons.

The gross earnings of the railroads centering at Chicago rose to the high figure of $660,800,972 in 1903, an increase of 87 per cent in ten years, though the mileage had grown only 26 per cent. These railroads employ in the neighborhood of three quarters of a million men. In Chicago and Illinois alone these roads have upwards of 86,000 men on their pay-rolls, and the wages paid them is close to $60,000,000. The greater share of this vast amount is distributed in Chicago and the immediate vicinity, as the headquarters of many of the large systems are here, and there are employed armies of clerks.

The railroads in the Chicago Terminal Association have about 700 miles of main tracks in the city limits.

Switch tracks and auxiliary tracks would bring this mileage in Chicago proper to the neighborhood of 2,000 miles. This network of steel has in it 7,000 switches, 7,200 frogs and 2,500 signal lights.

No less than 1,944 trains a day enter and leave Chicago. Of these 1,281 are passenger and 663 freight trains. The development of the suburban service has been great since the World's fair. Following is a table of the passenger trains running in and out of Chicago daily, Sundays excepted:

	Through.	Local.	Suburban.	Total.
Atchison, Topeka & Santa Fe	10	3	0	13
Baltimore & Ohio	6	2	0	8
Chicago & Alton	10	8	0	18
Chicago & Eastern Illinois	12	4	2	18
Chicago & Erie	7	6	2	15
Chicago & North-Western	44	64	208	316
Chicago & Western Indiana	0	0	16	16
Chicago, Burlington & Quincy	28	12	96	136
Chicago Great Western	6	3	0	9
Chicago, Milwaukee & St. Paul	13	70	30	113
Chicago, Indianapolis & Louisville	13	0	0	13
Chicago, Rock Island & Pacific	12	14	72	98
Chicago Terminal Transfer	0	0	8	8
C., C., C. & St. L. (Big Four)	10	0	0	10
Grand Trunk	8	2	10	20
Illinois Central	18	0	248	266
Lake Shore & Michigan Southern	16	6	54	76
Michigan Central	15	6	0	21
New York, Chicago & St. Louis	6	0	0	6
Niagara Falls Short Line	6	2	0	8
Pere Marquette	8	0	0	8
Pittsburg, Cincinnati, Chicago & St. Louis	8	4	0	12
Pittsburg, Ft. Wayne & Chicago	10	6	26	42
Wabash	16	3	0	19
Wisconsin Central	4	8	0	12
Totals	286	223	772	1281

The average number of freight trains operated by the Chicago roads daily are as follows:

	Freight Trains.		
	Out.	In.	Total.
Atchison, Topeka & Santa Fe	6	6	12
Baltimore & Ohio	11	9	20
Chicago & Alton	10	13	23
Chicago & Eastern Illinois	15	15	30
Chicago & Erie	11	10	21
Chicago & North-Western	50	45	95
Chicago, Burlington & Quincy	19	20	39
Chicago Great Western	8	7	15
Chicago, Milwaukee & St. Paul	33	36	69
Chicago, Indianapolis & Louisville	5	5	10
Chicago, Rock Island & Pacific	11	19	30
Chicago Terminal Transfer	12	13	25
C., C., C. & St. L. (Big Four)	2	2	4
Grand Trunk	13	12	25
Illinois Central	31	31	62
Lake Shore & Michigan Southern	17	17	34
Michigan Central	12	12	24
New York, Chicago & St. Louis	12	12	24
Pere Marquette	5	5	10
Pittsburg, Cincinnati, Chicago & St. Louis	13	10	23
Pittsburg, Ft. Wayne & Chicago	13	12	25
Wabash	15	12	27
Wisconsin Central	8	8	16
Totals	332	331	663

The total receipts by rail of flour and grain by the Chicago roads for 1904 were as follows:

Flour, barrels	8,877,105
Wheat, bushels	23,954,747
Corn, bushels	100,083,923
Oats, bushels	72,974,815
Rye, bushels	2,379,367
Barley, bushels	25,316,917

The total shipments by rail of flour and grain by the Chicago roads for 1904 were as follows:

Flour, barrels	6,564,533
Wheat, bushels	12,330,030
Corn, bushels	23,386,707
Oats, bushels	39,662,834
Rye, bushels	1,330,273
Barley, bushels	4,718,875

The total receipts by rail of leading commodities for the year 1904 at Chicago follow:

Cattle	3,259,185
Sheep	4,504,630
Live and dressed hogs	7,806,565
Dressed beef, pounds	208,204,901
Lard, pounds	54,549,592
Barreled pork, barrels	10,542
Other meats, pounds	200,221,000
Hides, pounds	165,700,650
Wool, pounds	72,673,060
Potatoes, bushels	9,327,220
Hay, tons	251,748
Lumber, thousand feet	1,274,626
Shingles, thousand	431,454
Cheese, pounds	90,937,788
Butter, pounds	249,024,146
Eggs, cases 30 dozen	3,113,858
Timothy seed, pounds	61,989,872
Clover seed, pounds	7,920,245
Flaxseed, bushels	1,869,913
Other grass seeds, pounds	18,812,780
Broomcorn, pounds	19,456,467
Canned meats, cases	12,381
Beef, packages	58,870
Salt, barrels	445,040
Tallow, pounds	19,977,491
Stearine, pounds	1,028,793
Oatmeal, barrels	234,864
Malt, bushels	1,797,177
Hops, pounds	8,856,026
Millstuffs, pounds	503,103,658
Oil cake, pounds	20,480,237
Coal, tons estimated	10,000,000

The total shipments by rail of leading commodities for the year 1904 at Chicago follow:

Cattle	1,326,332
Sheep	1,362,270
Live and dressed hogs	1,746,867
Dressed beef, pounds	1,072,156,300
Lard, pounds	336,546,963
Barreled pork, barrels	106,721
Other meats (hog), pounds	652,546,606

Hides, pounds	194,555,251
Wool, pounds	64,465,859
Potatoes, bushels	2,440,105
Hay, tons	11,660
Lumber, thousand feet	820,956
Shingles, thousand	434,195
Cheese, pounds	66,148,937
Butter, pounds	249,359,694
Eggs, cases 30 dozen	1,685,577
Timothy seed, pounds	24,754,145
Clover seed, pounds	6,223,528
Flaxseed, bushels	454,081
Other grass seeds, pounds	36,476,203
Broomcorn, pounds	15,971,629
Canned meats, cases	1,664,737
Beef, packages	95,839
Salt, barrels	372,408
Tallow, pounds	27,948,627
Stearine, pounds	9,030,906
Oatmeal, barrels	12,587
Malt, bushels	9,555,518
Hops, pounds	7,410,854
Millstuffs, pounds	444,777,783
Oil cake, pounds	69,869,916
Coal, tons estimated	1,600,000

Such in brief is the immensity of the railroad interests centering in Chicago at the beginning of the city's second century. It grew from small beginnings, the pioneer days of Chicago and Illinois railroading being fraught with many discouragements and hardships.

The first railroad legislation in Illinois, passed in 1831, had for its real purpose the facilitating of trade between Southwestern Illinois and St. Louis. It was five years later before the first railway charter was granted in the interest of Chicago. That pioneer road was the Galena & Chicago Union. Its charter was issued January 16, 1836, and the name indicates the two terminal points. It will be observed that Galena comes before Chicago, and that was right. It was then the more important town of the two.

The incorporators were clothed with large powers. They had only to ask and they would receive. They could use animal or steam power, whichever they preferred, and could be three years in getting to work. The capital stock was placed at $100,000, with power to add a cipher. The terminal point in Chicago was fixed at the south end of Dearborn avenue. A little work was done, but not much, just enough to vitalize the charter. Ten years passed before the enterprise was fairly placed on a practicable basis. From that time on it went ahead prosperously, developing into the Chicago & North-Western system, with its network of lines. It could not have a more appropriate name than it now bears, for it brings the Northwest and Chicago into close relationship. Galena is still afforded an outlet by this route, but the road was slow in reaching there. By 1850 it had only got as far west as Elgin. Only two days after the charter of the Galena & Chicago Union was granted the Legislature granted a charter for a railroad between

GARFIELD PARK.

Cairo and Peru. It was a project making rail connection subsidiary to water transportation. A link was supposed to be needed between the point where the Ohio River empties into the Mississippi, and the lower end of the Illinois and Michigan canal. Nothing came of that charter, although the route was the same, so far as it went, as that of the Illinois Central Railroad.

Practically the era of railroads began about the time that the Mexican war had expanded our national domain to the Pacific Ocean. The idea of depending on canals was very nearly abandoned by that time. It is a remarkable, but little remarked, fact, that hardly had this country become continental in area, reaching from ocean to ocean, before the idea of a railroad from Lake Michigan to the Pacific, that is, from Chicago to San Francisco, took formal but not immediately tangible form. Sidney Breese, then United States senator from Illinois, urged such a project and the Legislature of Illinois indorsed it. But Breese's colleague, Stephen A. Douglas, while not opposed to the Pacific project, took greater interest in securing a north and south railroad the entire length of Illinois. That was the more immediate demand, especially from the standpoint of the state. Senator Breese, afterward Judge Breese, lived to see his idea carried out, but he took no part in its execution, and before it was put into operation several east and west railroads having Chicago as their eastern terminus had been constructed; and the Missouri River, not Lake Michigan, had come to be regarded the terminal line on the east. But the Illinois Legislature of 1847 was clearly right in heartily concurring in the idea of a grand Pacific railroad from Lake Michigan to the Pacific Ocean, and Senator Douglas was also clearly right in giving a subsidy for the Illinois Central precedence over a subsidy for a cross-continent line.

With that hard sense in legislation which made him a great power in Congress, Mr. Douglas combined three states in his project, Illinois, Mississippi and Alabama. His bill was for a right of way and land subidy for a railroad from Chicago to Mobile. In the interest of Iowa it was amended to include a branch "to the Mississippi River opposite Dubuque." This bill was introduced in 1848 and became a law in 1850. That was the beginning of the land grant railway system which has done much to develop the West and thus to build up Chicago.

DOUGLAS PARK VIEWS.

The total grant in this state was 2,595,000 acres, most of it the best of agricultural land.

The Legislature of Illinois repealed the inoperative act of 1836, incorporating the Illinois Central Railroad Company, and complied with the provisions of the congressional grant, so far as the same related to this state, using the name of Illinois Central. Right here comes in the part played by the state debt, incurred in large part in the construction of the Illinois and Michigan Canal. The holders of the state bonds conceived the idea of utilizing the Illinois Central project to make sure that the state should be in a condition to meet the interest on those on its debt. They secured, through the influence at Springfield of their attorney, Robert Rantoul, one of the great New England lawyers of the day, a provision to the effect that in lieu of all other taxation the company should pay into the state treasury

seven per cent of its gross earnings. This was a good arrangement for the state also, and is now made perpetual by constitutional guarantee.

The Illinois Central was completed in the summer of 1854. Then for the first time and for all time Chicago became the veritable metropolis of Illinois, affording the surplus products of the state its entire length their best outlet to the populous East and the Atlantic seaboard. From this time on Chicago had no occasion to be at all anxious about its future. The railway system of the West was compelled by self-interest to literally "make tracks" for this city. The eastern trunk lines, the Michigan Central and Lake Shore & Michigan Southern, were obliged to come here with and for their business. New Buffalo, Fort Wayne and such points to the east were obliged to content themselves with being way stations.

When the great fire of 1871 came it was the network of railroads centering in this focal point which made the rebuilding of the city inevitable. If every structure in the city had been leveled to an ash heap it would have been the same. Not only was the Chicago river here to renew its invitation to lake commerce, but the railroads were intact. Their depots only were gone, and not all of them.

Important as Chicago had become at the time of the fire as a railway center, it may be said to have entered upon a new railway era with 1872. Its mileage was about doubled in a decade, and from the Grand Trunk on the north to the Baltimore & Ohio on the south the necessity of reaching this city was recognized. Nor is it too much to say that the entire Western system of railroads, including Mexico and Canada, center directly or indirectly in Chicago.

In order to give further clearness to the conception of Chicago as a railway center there is herewith appended a table presenting the more important general facts about the railway systems which have in this city a common meeting-place.

Chicago & North-Western Railway Company. Chicago's Pioneer Railway System. The growth of Chicago, unprecedented as it has been, has not been greater than the expansion of its first line of railway. In 1848 Chicago boasted of only ten miles of rail, extending west from Wells and Kinzie streets, the present site of the Chicago & North-Western passenger station, to the Des Plaines River. This ten miles of track was destined to become the nucleus of a system of more than 9,000 miles of railway, with wharves, elevators, warehouses and yards with which to care for an immense freight traffic.

Three hundred passenger trains arrive and depart daily from its Wells street station, serving more than 1,700 western communities, with a tributary population of 8,000,000 people.

Probably no feature has done so much towards promoting the wonderful growth of Chicago since its settlement in 1803 as the development of the city's transportation facilities to the West and Northwest. It was thoroughly typical of the spirit that has made possible the Chicago of to-day, and our western country in general, that only twenty months after the territory east of the Mississippi River had been ceded to the United States by the Indian tribes, citizens of the active little town on Lake Michigan secured a charter for the building of what has now developed into the great Chicago & North-Western Railway System.

Thus the history of this pioneer railway of the West is closely linked with the history of the city with which it has grown and developed, and the interests of the two have intermingled as the years have passed.

Chicago's fame and Chicago's wealth have both depended largely upon her importance as a grain and live stock market, and the first train into Chicago on what is now the North-Western Line holds the dis-

RAILROADS	Mileage.	Capitalization.	Passengers Carried.	Freight Carried (Tons).	Passenger Earnings.	Freight Earnings.	Gross.	Net.
Atchison, Topeka & Santa Fe	8,301	$445,631,580	7,622,012	13,195,597	$15,433,774	$47,762,653	$68,171,200	$24,033,031
Baltimore & Ohio	3,987	422,779,227	15,403,061	43,347,193	13,146,449	48,617,103	65,071,081	20,136,707
Chicago, Burlington & Quincy	8,821	281,854,200	14,098,053	20,634,024	14,494,573	44,651,997	65,228,192	20,649,250
Chicago and Alton	915	106,086,800	3,227,611	6,121,333	3,351,943	7,445,877	11,425,853	3,561,253
Chicago & Eastern Illinois	758	44,049,136	4,159,682	9,445,731	1,224,031	7,203,621	8,664,043	3,327,651
Chicago & North-Western	7,412	223,788,483	21,395,312	28,128,810	13,027,708	37,254,539	53,334,633	16,107,524
Chicago Great Western	874	82,040,845	1,938,340	2,825,601	1,780,151	5,811,059	8,022,674	1,902,632
Chicago, Indianapolis & Louisville	592	29 942,000	1,400,026	2,965,945	1,239,101	3,735,029	5,300,623	1,884,454
Chicago, Milwaukee & St. Paul	6,906	224,305,800	9,752,419	21,267,370	9,661,633	35,081,759	48,330,334	17,161,320
Chicago, Rock Island & Pacific	7,205	247,047,600	11,536,847	13,567,817	11,697,033	31,167,006	44,969,491	17,169,014
Chicago & Western Indiana	113	22,895 060	Terminal	roads own the	Dearborn	Station, in	Polk St.	
Chicago Terminal Transfer	268	47,392,234	.....	.....	61,794	1,527,016	1,588,765	93,201
Cleveland, Cincinnati, Chicago & St. Louis	2,287	100,657,800	6,115,443	12,510,586	6,378,877	13,053,864	21,069 954	4,339,728
Erie	2,315	368,065,561	20,395,440	29,835,105	8,077,464	32,522,742	43,005,213	12,742,515
Grand Trunk	3,562	340,144,312	9,099,567	13,484,056	7,871,668	18,879,156	26,750,824	8,315,293
Illinois Central	4,374	246,712,275	22,563,613	22,420,814	9,554,743	31,692,575	46,831,136	12,095,453
Lake Shore & Michigan Southern	1,454	141,324,000	6,176,269	26,846,891	7,095,790	24,185,294	35,161,053	12,481,008
Michigan Central	1,653	79,664,000	3,657,010	13,551,195	4,818,763	15,273,012	21,492,944	3,340,278
New York, Chicago & St. Louis	523	49,425,000	895,568	5,147,411	1,336,834	7,152,631	8,645,374	2,223,231
Pere Marquette	1,941	71,773,622	3,227,611	6,121,333	3,351,943	7,445,877	11,425,853	3,561,253
Pittsburg, Ft. Wayne & Chicago	1,526	.....	.....	.....	5,868,722	27,485,171	36,390,582	10,347 220
Pittsburg, Cincinnati, Chicago & St. Louis	1,423	76,095,400	10,415,946	30,940,272	6,799,839	19,148,917	28,532,475	7,166,811
Wabash	2,517	162,513,000	6,183,474	6,698,995	7,045,525	14,064,657	23,023,627	4,589,959
Wisconsin Central	977	54,770,980	1,159,904	3,944,020	1,405,783	4,765,605	6,466,177	1,871,525

tinction of having brought the first rail shipment of grain to the city. To-day these pioneer shipments have grown until $350,000,000 worth of live stock reaches the Chicago market each year, and the Chicago & North-Western alone brings to the city a quarter billion bushels of grain annually.

It was the North-Western Line which, pushing its rails into Council Bluffs in 1867, hastened the building of the Pacific railways and the completion of all-rail connection between the Atlantic and the Pacific, and it has now gained national note as being "the only double-track railway between Chicago and the Missouri River."

Over this great double-track, block system line between Chicago and Council Bluffs, long trains of live stock and grain, of California fruits, and of silks, teas and spices from the far East move in steady lines eastward; while in the opposite direction the products of every branch of commercial activity are carried to the markets of Asiatic Russia, Japan, China, the Philippines and Australia, Alaska and Hawaii, and to the nearer markets of the central West, the Rocky Mountain region and the Pacific Coast.

The famous "Overland Limited" and other daily trans-continental trains stand as splendid examples of long-distance travel, travel, too, that is surrounded by luxuries and comforts the western traveler of thirty years ago could not have imagined.

Colorado, not so long ago considered to be in the extreme far West and visited by comparatively few eastern people, is now reached by the North-Western Line and its connections in a day and a night with two fast through trains to Denver daily.

CHICAGO & NORTH-WESTERN DEPOT.

Nor are the activities of the North-Western Line confined to this east and west movement. To the northward it is the pioneer line and direct route to the hardwood country and iron and copper mines of northern Wisconsin and the upper peninsula of Michigan, furnishing means of transportation for the enormous products of this rich region.

St. Paul and Minneapolis, twin gateways to the

Northwest, are closely linked to Chicago with four fast trains daily in each direction.

To Duluth and Superior there are two daily trains, The "Duluth-Superior Limited," electric-lighted

throughout, affords to passengers to the head-of-the-lakes all the comforts and convenience of modern high-class travel.

Between Chicago and Milwaukee the North-Western Line operates twenty-one trains a day over what is practically a six-track line along the beautiful shore of Lake Michigan, the "North Shore Special," the train of green and gold, being the most handsomely equipped train ever placed in service to and from the Cream City.

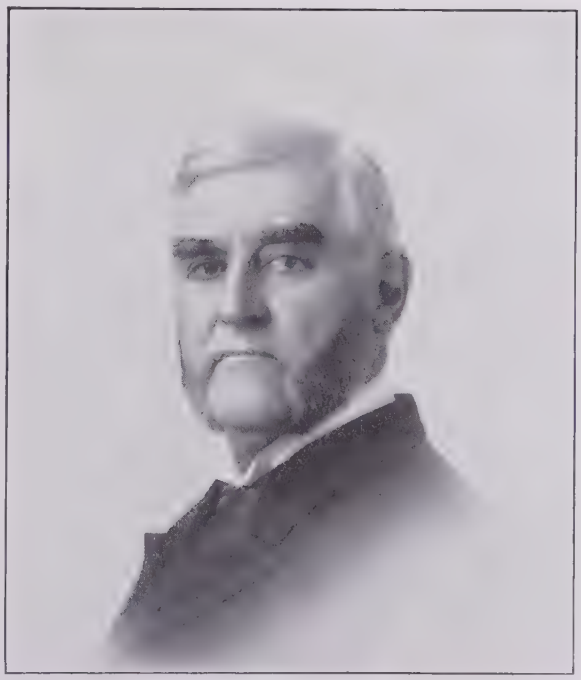
This year thousands have visited the Lewis & Clark Centennial Exposition at Portland, Oregon, traveling westward from Chicago over its rails, and thousands more find its train service a convenient means of travel to and fro between Chicago and Colorado, Utah, California and the Pacific Northwest, to the Black Hills, the Yellowstone National Park, Alaska, and to the hundreds of summer resorts and hunting and fishing grounds of Wisconsin, Michigan and Minnesota.

Marvin Hughitt's meteoric career has ever been up and onward. In his vocabulary there has never been such a word as "failure." Marvin Hughitt was born at Seneca, New York, in 1836. He entered the railway service as superintendent of telegraph and trainmaster of the St. Louis, Alton & Chicago road (now Chicago & Alton).

From 1862 to 1864 he was superintendent of the southern division of the Illinois Central Railroad and was afterward general superintendent of that road until 1870, when he became connected with the Chicago, Milwaukee & St. Paul Company as assistant general manager. He relinquished his position in 1871 to become general manager of the Pullman Palace Car Company.

In 1872 he went to the Chicago & North-Western Railway as general superintendent and has remained with that company ever since, serving from 1876 to 1880 as general manager, from 1880 to 1887 as vice-president and general manager and from 1887 to the present time as president of the company.

No better illustration of the marked ability of Mr. Hughitt can be found than his wonderful record of



MARVIN HUGHITT.

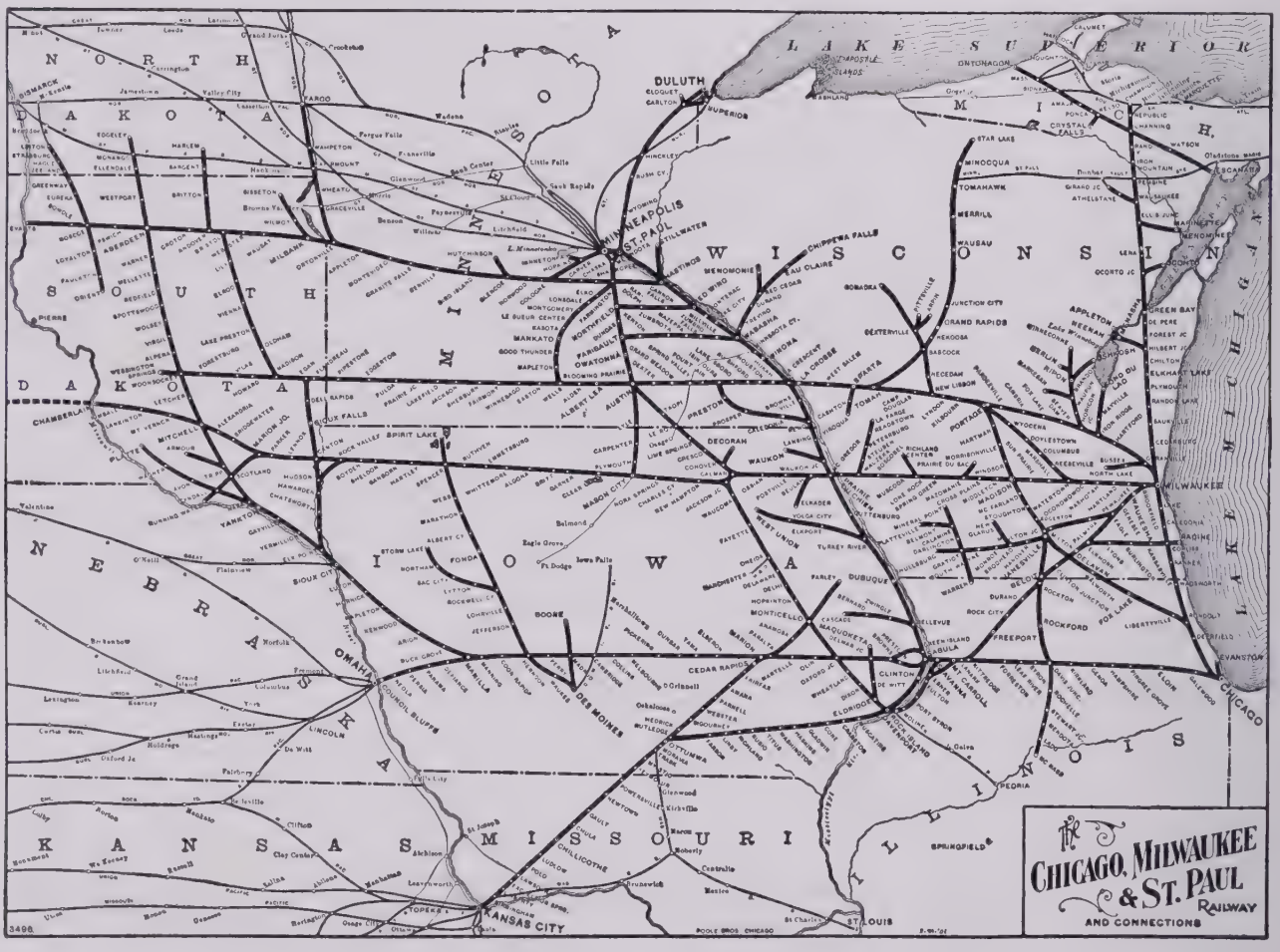
forty-eight years of railroad work. Despite his assiduous attention to work, Mr. Hughitt has found time to accumulate a particularly fine library. His palatial

residence on Prairie avenue is one of the show places of that fine boulevard.

Mr. Hughitt is a member of the Chicago and Union League clubs. His summer home is at Lake Forest.

Chicago, Milwaukee & St. Paul Railway Company. The beginning of the present Chicago, Milwaukee & St. Paul Railway Company dates from 1849, when the Milwaukee & Mississippi Company was formed for the purpose of connecting that city by rail with the Mississippi. In April, 1857, the road was completed to Prairie du Chien, but two years later, the company being unable to pay its interest, a mortgage sale was ordered, and a new company, which had been chartered by the Legislature in 1860, under the name of the Milwaukee & Prairie du Chien Railway Company, purchased the property January 21, 1861. This company operated the road until 1866, when it was absorbed by the Milwaukee & St. Paul Railway Company.

The Milwaukee & Watertown Railroad, now part of the La Crosse division of the Chicago, Milwaukee & St. Paul Railway, was incorporated in March, 1851, and by the latter part of 1856 trains were running from Milwaukee to Columbus. After going through a variety of changes the road became the Milwaukee & St. Paul Railroad in 1863, and the La Crosse division of the present company in 1866. In April, 1852, the La Crosse & Milwaukee Railroad Company was incorporated, and in June, 1853, by a consolidation of two other railroad charters, the Milwaukee, Fond du Lac & Green Bay Railroad Company was formed, and work begun on the line from Milwaukee toward Fond du Lac. Two years later the La Crosse & Milwaukee Railroad Company was consolidated with the Milwaukee, Fond du Lac & Green Bay Railroad Company, assuming the name of the latter company, and after a series of litigations the Milwaukee & St. Paul Company gained final possession, by purchase, of the property in 1867. This same company also acquired the Milwaukee & Horicon road by purchase in 1863.


L A K E S U P E R I O R
N O R T H D A K O T A
S O U T H D A K O T A
N E B R A S K A
K A N S A S
I O W A
M I N N E S O T A
W I S C O N S I N
M I C H I G A N
I L L I N O I S
M I S S O U R I
DULUTH
MINNEAPOLIS
ST. PAUL
OMAHA
KANSAS CITY
ST. LOUIS
CHICAGO
MILWAUKEE
THE CHICAGO, MILWAUKEE & ST. PAUL RAILWAY
AND CONNECTIONS

Dubuque & Southwestern Railroad, in Iowa; the Minnesota Midland Railway Company, in Minnesota; the Madison & Portage Railroad, Viroqua Railway Company, and Oshkosh & Mississippi Railroad Company, all of Wisconsin. During 1880 eight roads, with a total of 1,195 miles, were added to the system, which was further increased during the year by the construction of 349 miles of branches and extensions. In 1881, 442 miles of road were added; in 1882 the system was further increased by 303 miles; in 1883; by 240 miles; in 1884, by 44 miles, thus making a total on January 1, 1885, of 4,760 miles of road under operation by this company. Since 1885, further lines have been leased or built, until there are now operated 7,085 miles of thoroughly-equipped road in the states of Illinois, Wisconsin, Iowa, Minnesota, South Dakota, North Dakota, Missouri and the upper peninsula of Michigan.

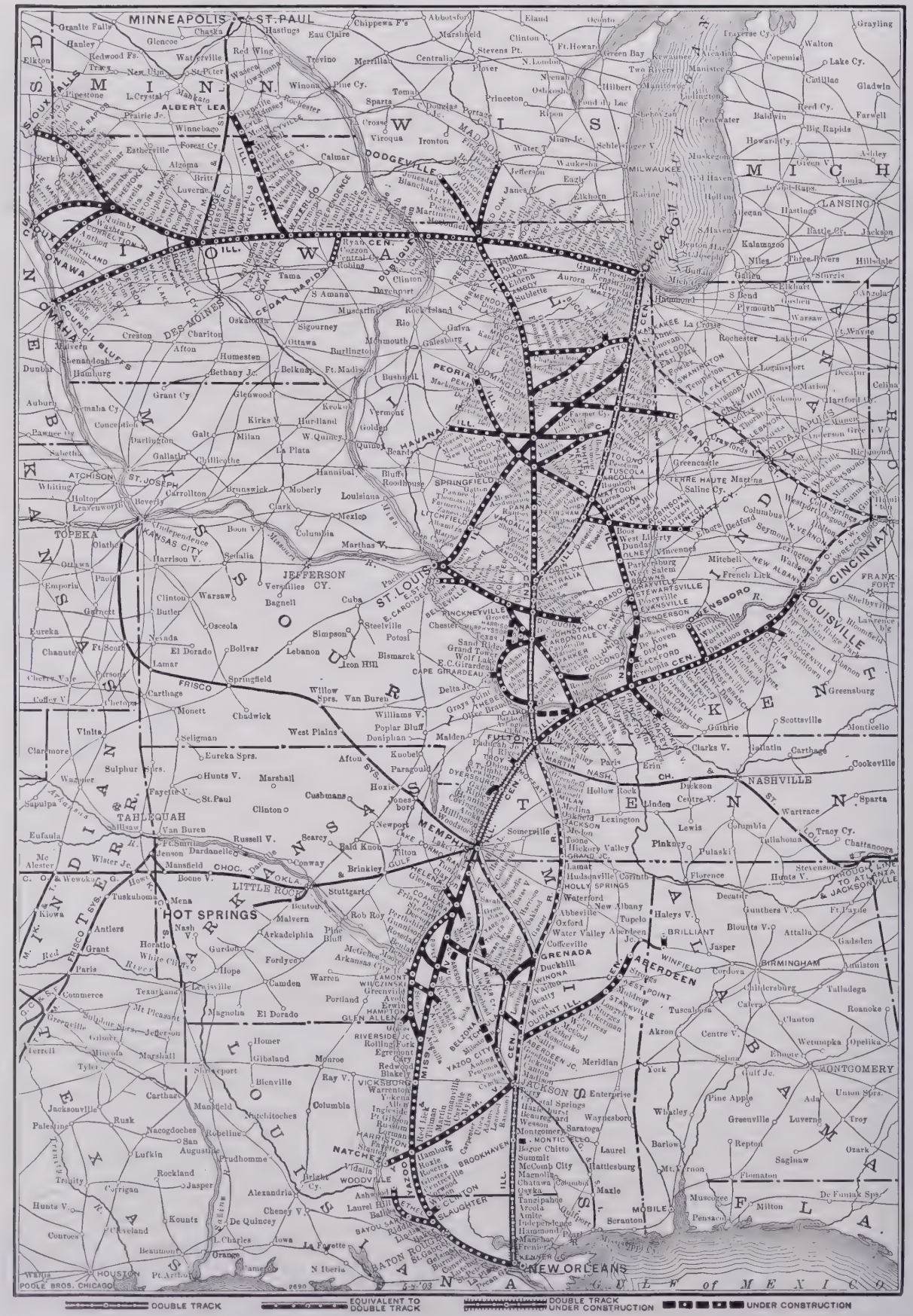
The Chicago, Milwaukee & St. Paul Railway Company has been the foremost line in the West in adopting every possible appliance for the safety and comfort of its passengers, including an absolute block system, Westinghouse train signals, steam heat, electric light, vestibuled and compartment cars. Its train service is unsurpassed, and its celebrated train, "The Pioneer Limited," which leaves Chicago every night at 6:30, reaching St. Paul and Minneapolis early the following morning, is well entitled to the claim made for it, that it is the only perfect train in the world.

Illinois Central Railroad. As will be seen from the accompanying map, the lines of the Illinois Central Railroad extend south from Chicago to St. Louis, to Evansville, and to Memphis and New Orleans; south from St. Louis and Louisville and Cincinnati to Memphis and New Orleans; and from Chicago west to Council Bluffs and Omaha, to Sioux City and to Sioux Falls. The total mileage of this great railroad, including that of the Yazoo & Mississippi Valley Railroad from Memphis to New Orleans, was 5,584 miles at the close of the last fiscal year, June 30, 1905.

The material, or tangible, beginning of the Illinois Central may be said to have been in the years 1855 and 1856, at which time its original 706 miles were completed and opened between Dunleith, now East Dubuque, and Cairo, and between Chicago and Centralia.

ILLINOIS CENTRAL DEPOT.

Its first passenger station in Chicago was at Twelfth street, on a section of the grounds now occupied by



ILLINOIS CENTRAL RAILROAD.

its present "Central Station" located between Park Row and Twelfth street on the Lake Front. Early in its development the line was extended to the foot of Lake street over trestle-work constructed for the purpose, thus crossing the waters of the lake encroaching on what is now Michigan avenue. Later, on the filling in of this water stretch by the city and the railroad company, the trestle-work disappeared. A few years ago when the Illinois Central depressed its tracks between Park Row and Van Buren street this trestle-work was uncovered. At the new terminus on Lake street, what was in its day a fine stone station, was erected, and became ultimately one of the last relics of Chicago's great fire. In 1893 it was abandoned and the present Central Station occupied as the passenger terminal for through trains.

During the intervening years, between 1856 and the present day, the Illinois Central has contributed its share towards the development of the Mississippi Valley and the City of Chicago. By dikes, piers and breakwaters the company has for fifty years protected the City of Chicago against the encroachment of Lake Michigan, and has spent in so doing over three million dollars of money. It was a large factor in making the World's Fair of 1893 possible, it being the first railroad in the city to elevate its tracks. It made possible, by filling and reconstruction, the Lake Front Park from an unsightly loafing ground to the present attractive Logan Park along Michigan avenue, and will build the inner wall marking the boundary of the new park along the Lake Front which is being so rapidly filled in.

That it is an important factor in the tax situation of the City of Chicago will be seen from the following facts: The charter of the Illinois Central Railroad Company reserves for the State of Illinois, in lieu of taxes, seven per cent of the gross receipts of the 706 miles of railroad originally built under the charter. The sum so paid for the year ending June 30, 1903, was the largest ever turned into the state treasury, it having been $1,026,650.84. This, if capitalized at three and one-half per cent would give $29,332,880 as representing the proprietary interest of the State of Illinois in the Illinois Central Railroad The City of Chicago pays rather more than one-third of the total taxes of the State of Illinois. From these two facts it will be apparent that the direct money interest of Chicago in the Illinois Central Railroad is considerable. In short, valuable as are the company's lands and buildings to Chicago, the saving in taxation to the city is very largely in excess of what would be paid by direct taxes, and largely in excess of what is paid by any of its competitors.

In line with the early history of the road within the City of Chicago, it should not be forgotten to mention the extraordinary development in connection with its suburban service. The Illinois Central's first suburban train was run out of Chicago June 1, 1856, to a point just south of Hyde Park. At first there were but three trains a day in each direction, increasing in number as circumstances warranted. They were run, however, up to 1864 at a loss to the company, and it is questionable whether the latter received any profit from its suburban service for many years after that date. Beginning about 1880, however, by the inauguration of special equipment, and the addition of two tracks for the exclusive use of the suburban trains, an era of prosperity began for this service which has continued ever since. To-day it runs 122 trains, including express and local, in each direction between Randolph street and suburban points, not counting its suburban service west. Another era in this suburban train development dates from the World's Fair of 1893, at which time the special service designed for that occasion was put in effect. Between May 1 and October 31, the exposition period, 29,528,435 passengers were carried on the suburban trains of the Illinois Central without the loss of a life. In addition, out of this Columbian Exposition service was developed the present express suburban service, operated on double tracks independent of the double tracks assigned to the local suburban service, making four tracks in all for the suburban business.

In conclusion it should not be forgotten that the Illinois Central, with its fast through passenger and its fast manifest freight service, is a most important factor in linking Chicago to the South and West.

Chicago Terminal Transfer Railroad Company. Although chartered as recently as June 4, 1897, the history of this property dates from 1867, when the old La Salle & Chicago Railroad Company was granted the power by the Legislature to construct a line of road between the points named in its title. No determined effort was made to construct the line until 1885, when parties secured an interest in the organization with a view of constructing the line and employing it as a link in a through route from Chicago to the Northwest. The Chicago & Great Western Railroad Company was the title under which operations were continued until 1890, when the Chicago & Northern Pacific Railroad Company, organized the previous year, purchased and consolidated under one management the Chicago & Great Western Railroad Company, the Chicago, Harlem & Batavia Railway Company and the Bridgeport & South Chicago Railroad Company, together with the property on which is located the Grand Central Passenger Station in Chicago. The road was operated as the Chicago & Northern Pacific Railroad Company until 1897, when the Chicago Terminal Transfer Railroad Company, chartered on June 4 of that year, acquired,

through sale under foreclosure, all the property owned by this road, and subsequently also acquired the property of the Chicago & Calumet Terminal Railway Company, a consolidation, brought about in 1888, of the Calumet River, Hammond & Lake Michigan and Chicago & Calumet Terminal Railroad companies. These, in brief, have been the principal steps leading up to the formation of the most extensive terminal company operating in and about Chicago.

The Chicago Terminal Transfer Railroad Company is a company formed to acquire and lease facilities to other roads and to transact a local suburban and switching business. The property of the company consists of passenger and freight terminals in the business center of the city, lines of railway leading thereto, and a belt line about the city, just outside the corporate limits. At the present time the terminals of this company are used by the Chicago Great Western Railway Company, Baltimore & Ohio Railroad Company and Pere Marquette system. It also leases a considerable trackage to the Chicago Junction Railway Company, Wabash and Suburban Railroad. The Chicago Terminal Transfer Railroad Company has direct connection, by means of its 244.5 miles of track, with every railroad entering Chicago, and it thus affords a rapid transfer of freight between different lines. Starting from South Chicago, its belt line runs through Whiting, Indiana, and thence in a western and northwestern direction to McCook, Illinois, thus reaching the leading industries and manufacturing plants located at South Chicago, Whiting, East Chicago, Hammond, Blue Island, Harvey, Thornton, Chicago Heights, Chicago Ridge, Chappell and McCook. It also has connections with the industries at La Grange, Broadview, Bellewood, Melrose and Franklin Park. An extension from the latter point to Mayfair is now under construction, and when that is completed it will afford direct connections outside corporate limits with all the railroads centering in the city. The amount of traffic originating on this railroad and delivered daily to the railroads by this company is very large. By its facilities for prompt transfer, its motive power and equipment it has attained a front

GRAND CENTRAL PASSENGER STATION.

rank in its particular field among the roads dependent upon it.

From Blue Island the Chicago Terminal Transfer Railroad Company has a line running directly north into the city to Western avenue and West Twelfth street, and from thence to the Grand Central Passenger Station, at Harrison and Fifth avenue, thus affording a second connection with many of the trunk lines within the city limits.

When it is considered that the railroads entering Chicago are by far the greatest factor in the city's trade and commerce, the importance of the road under consideration, with its facilities of track, terminals, connections, etc., is the more easily understood. Besides operating nearly 250 miles of track, this company also owns over 760 acres of real estate in and adjacent to the city, of which more than 50 acres are in the center of the business portion. It owns about 7,500 feet of frontage on the Chicago river, and also the Grand Central Passenger Station in the heart of the city. The latter, which covers nearly four acres of ground, is one of the best specimens of the highest type of modern architecture to be found in the United States, and it is classed among the great buildings which have made Chicago famous. Constructed of pressed brick and Connecticut brownstone, it is surmounted by a tower, 242 feet high above the foundation, 27 feet square, and weighing 6,000 tons. This tower contains the second largest clock in the United States, having four dials, each 13½ feet in diameter. The hours are struck by a hammer, weighing 250 pounds, on a 5½-ton bell. The building, which was opened to the public on Monday, December 8, 1890, has a frontage on Harrison street of 228 feet and of 482 feet on Fifth avenue. The main waiting-room, situated on the ground floor, is 267 feet long, 71 feet wide, and with a ceiling 25 feet high. A ladies' parlor, 32x40 feet, adjoins the same. To enter trains, passengers do not have to climb stairs, but enter the train-shed directly from the waiting-room. Another feature of its construction worthy of special notice, is the carriage court, 146x167 feet, by which carriages, buses and automobiles in large numbers at once can enter and discharge their passengers at the entrance to the waiting-room and train-shed. A dining-room, 56x73 feet, is located on the second floor, and the remainder of the upper floors is devoted to offices, including the general offices of the Chicago Terminal Transfer Railroad Company.

A noteworthy feature, which should be mentioned in regard to this company, is the commanding position which it occupies with respect to freight terminal facilities, as well as passenger accommodations. Its tracks penetrate the heart of the manufacturing district of Chicago, and the growth of its switching business, so-called, has been phenomenal, consequent upon the increase in the number and extent of such manufactories. Its tenant lines have benefited in this regard, they enjoying the right to handle the traffic with their own engines to and from tracks to industries tributary to the main tracks, which they have the use of under their respective leases. But other railroads entering Chicago, alive to the situation in this regard, have not been slow to appreciate the advantage which follows direct connection with the manufacturing interests spoken of; hence there is a constant demand from what may be termed outside railroads for branch freight terminal facilities in the district referred to, and the day is not far distant when the larger proportion of the railroads reaching Chicago will of necessity have established

JOHN NICHOLSON FAITHORN.

facilities for the receipt and delivery of freight on the rails of this terminal company.

The officers of this company are: John N. Faithorn, president and general manager; S. L. Prest, comptroller; H. H. Hall, treasurer; W. B. Barr, general freight agent; J. B. Barton, general attorney; E. R. Knowlton, superintendent.

John Nicholson Faithorn, president and general manager of the Chicago Terminal Transfer Railroad, was born at London, England, March 21, 1852. After receiving a common school education, and spending three years in the employ of the London and St. Katharine Dock Company, he embarked for the United States when twenty years of age.

In February, 1873, the year following his arrival here, he received his first experience in railroading in the freight department of the Chicago & Alton Railroad.

He was successively clerk, general freight agent's secretary and chief clerk in the general office of the company. Mr. Faithorn left his position with the Chicago & Alton in September, 1882, to become auditor of the Southwestern Railway association. In May, 1885, he made another change, accepting the position of commissioner of the Western Freight Association and Northwestern Freight Association.

From April 1, 1887, to October, 1890, he was successively commissioner of the Western & Northwestern Railway Freight Bureau, and chairman of the Western Freight Association. The following two years, from October, 1890, to December, 1892, he was chairman of the Southwestern Railway & Steamship Association and commissioner of the Western Freight Association at St. Louis, Missouri. From January 1, 1893, until December 1, 1898, Mr. Faithorn was vice-president and general manager of Street's Western Stable Car Company at Chicago. In 1895 and 1896, he was also general manager of the Wisconsin & Michigan Railway. In December, 1898, he was made president and general manager of the St. Louis, Peoria & Northern Railway. August 1, 1889, he became president and general manager of the Chicago Terminal Railroad. He still holds this position.

Twenty years after Mr. Faithorn left the employ of the Chicago & Alton Railway he returned to the company in July, 1902, as vice-president. He held this last position until December, 1904, along with his present position, as president and general manager of the Chicago Terminal Transfer Railway.

Mr. Faithorn is a member of the Chicago Club, the Chicago Athletic Association and the Engineers' Club of New York.

The Chicago & Eastern Illinois Railroad is the great coal road of the West. How many people among the city's 2,000,000 inhabitants know that it is entitled to be called "the road that keeps Chicago warm"?

Few, indeed, probably, yet it is a fact that this line with its splendidly ballasted main stem and branches traversing the rich bituminous mining sections of Illinois, Indiana and Missouri, brings into the great city by the lake over five-eighths of its entire soft coal supply. Thus, after forty years, the original purpose in building the Chicago & Eastern Illinois Railroad as a coal-carrying road has never been lost to sight, but has steadily developed by wise management into the business of to-day—an ample vindication of the courage and judgment of its projectors and backers of more than a generation ago.

But, remarkable as the growth of this road has been on its freight-carrying side, the progress made in the development of its passenger traffic is even more noteworthy, because it has been a growth of comparatively recent years, and the obstacles have been more difficult to overcome. All the more honor and credit then to the men whose executive skill and trained ability have produced these results. To-day the general passenger agent, from his headquarters in the magnificent new $1,000,000 La Salle Street Station, Chicago, directs a passenger service that is growing by leaps and bounds. Since the formal opening of the Chicago & Eastern Illinois passenger line between Chicago and St. Louis, July 31, 1904, the public has been quick to appreciate the high standard of service maintained, and to respond with liberal and constantly increasing patronage.

The up-to-date spirit of enterprise that permeates every department of the Chicago & Eastern Illinois Railroad is seen in the advertising policy of the company. A carefully thought out and well systematized campaign of publicity is being carried on under the direction of the general passenger agent. Liberal newspaper space is used, and the copy features the special points which appeal to the average person traveling either for business or pleasure. Emphasis is laid upon the smooth double-track, block signal system, ventilation and cooling of all cars by means of electric fans, electric reading lights in berths, splendid dining car service, etc. By this kind of intelligent advertising, the public is favorably influenced, and the result is readily seen in the increased volume of business.

The Chicago & Eastern Illinois Railroad through its affiliations with the Frisco system is now enjoying a large and growing passenger traffic from Chicago through St. Louis to the great Southwest. It is now admittedly the best route to Galveston, Houston, Dallas, Fort Worth, Oklahoma City, and other points in that great and prosperous region.

This line also reaches New Orleans, running splendidly equipped trains in connection with the Louisville & Nashville, via Nashville, Birmingham, Montgomery and Mobile. For several years the Chicago & Eastern Illinois Railroad has had a practical monopoly of the Chicago-Florida travel. During the past twelve months it has controlled about 90 per cent of the traffic to Jacksonville, St. Augustine, Tallahassee, Pensacola and other Florida points.

One of the peculiarly fortunate circumstances that have contributed to the rapid development of travel over this popular line, is the location of its general offices and depot in the La Salle Street Station, Chicago. The location is ideal for the convenience of the road's patrons, being the only railroad station on the Elevated Loop and within three or four minutes' walk

several of the divisions of the Pennsylvania lines. He filled the position of superintendent of the Richmond and Louisville divisions of the Pennsylvania lines and main line division of the Vandalia system, and in June, 1901, was appointed general manager of the Vandalia system. On December 15, 1903, he was appointed general manager of the Rock Island system, and on March 1, 1905, was elected second vice-president and general manager of the Chicago & Eastern Illinois Railroad, and vice-president of the Evansville & Terre Haute Railroad, Evansville & Indianapolis Railroad, and Evansville Belt Railway.

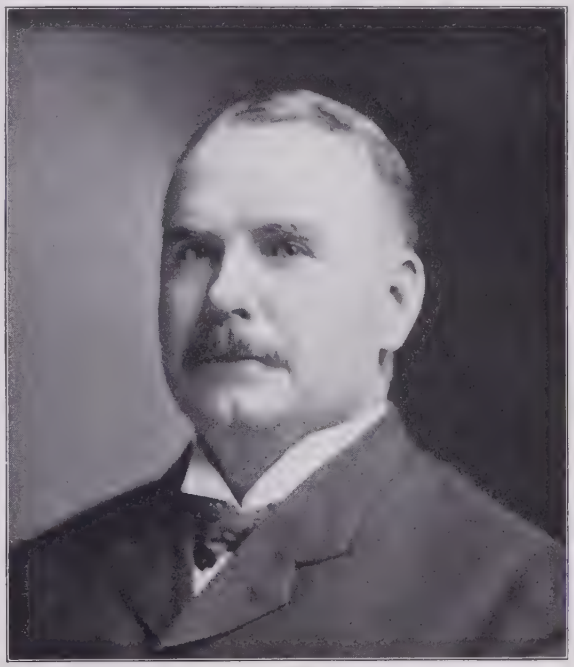
His father is John F. Miller, who was for many years identified with the Pennsylvania Lines in an

HARRY I. MILLER.

official capacity and is now vice-president of the Cleveland, Akron & Columbus Railway.

W. J. Jackson, general superintendent of the Chicago & Eastern Illinois at Chicago, has for twenty-eight years have been in active service. He was born in Toronto, Canada, December 28, 1859, the only son of John and Jane Jackson.

In November, 1877, as machinist's helper, he went to work at the Grand Trunk railway shops, in his native city. The following year he worked as a freight handler and after that as freight clerk. He came to Chicago in 1882, becoming chief claim clerk for the Grand Trunk, and three years later he was promoted to the position of general freight foreman. From November, 1890, to August, 1891, he served as assistant agent for the road. He left the Grand Trunk in November to accept a position as assistant local freight agent for the Chicago & Eastern Illinois, which he held until January, 1893, when he was appointed local agent.



W. J. JACKSON.

He became assistant general superintendent of the line in July, 1899, and in February, 1903, he became general superintendent.

Mr. Jackson is a man of domestic tastes and has little to do with clubs. He has always been affiliated with the Republican party. He was married to Miss Eliza Preston. They have a family of four children, three daughters, Anna May, Edna Gracey and Emma Isabella, and a son, Arnold.

The Chicago & Western Indiana Railway extends from Dearborn Station, Chicago, to Dolton, with an extension to the Indiana state line, near Hammond, Indiana. It is a terminal road and has been used for over twenty years for an entrance into Chicago by the Wabash, Grand Trunk, Monon, Erie and Santa Fe railroads. These popular railway systems extend into all parts of the East and West; from Portland, Maine and New York City in the East, to Los Angeles and San Francisco, California, in the West.

Dearborn Station on Polk street is easily reached from all parts of the city and is one of the most beautiful and commodious stations in the city. Its use by eastern, southern and western roads, makes transfer of passengers from one road to another easy and convenient.

The Belt Railway Company of Chicago is popularly known as the Inner Belt Line, and it enjoys a

large business in the transfer of freight cars between the various railroad lines, industries and warehouses in and about Chicago. Its tracks extend from the Chicago, Milwaukee & St. Paul Railway (Cragin) to South Chicago and the South Chicago docks, connecting with all railroads entering the city. Many large industries are located on the Belt Railway. Among them may be mentioned the great works of the Illinois Steel Company and the International Harvester Company, Deering Division, at South Chicago, the new and extensive plant of the Western Electric Company, and Pettibone, Mulliken & Company, the Morden Frog & Crossing Works, International Salt Works, Western Steel Car Company, besides innumerable elevators, iron furnaces, coal and lumber yards.

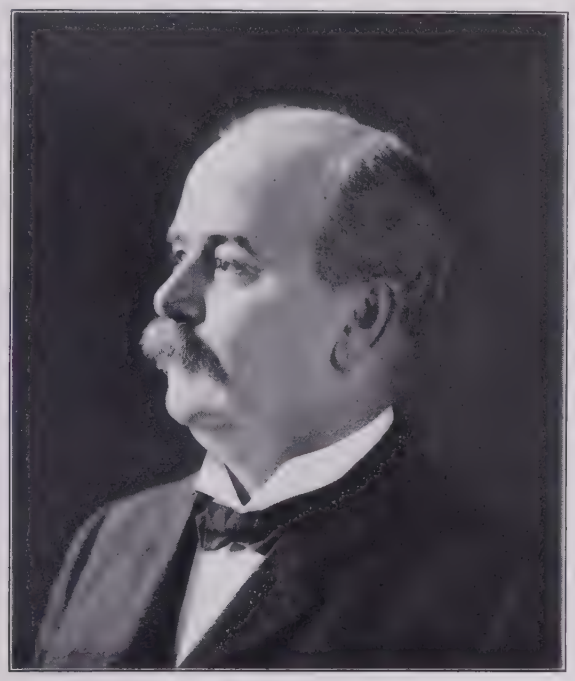
The management is constantly receiving inquiries from and furnishing information to parties seeking suitable sites for industrial plants.

POLK STREET DEPOT.

Pullman's Palace Car Company was organized under the laws of the state of Illinois in February, 1867, by the late George M. Pullman, with a capital of $100,000. As originally founded, it was a comparatively small industry in proportion to its present magnitude, and from the company, as it was first established for the purpose of constructing sleeping cars after the pattern of Mr. Pullman's invention, it has grown to a corporation with a capital stock of $74,000,000, and facilities for building, not only sleeping cars, but passenger and freight cars of all descriptions. A few figures regarding this great industry cannot fail to be of interest. The shops at Pullman have a capacity of turning out an average of six sleeping cars, fifteen passenger coaches, and 400 freight cars per week. In the shops about 54,000 tons of coal are consumed annually, and over 100,000 tons of iron and about 56,500,000 feet of lumber are used. The total amount of wages paid by the company to its employees at Pullman, from September 1, 1880, to July 31, 1904, was $67,174,361.05, and the value of materials used during the same period was $141,213,423.10. The number of cars owned and controlled by the company at the close of the fiscal year ending July 31, 1904, was 4,095, consisting of sleeping, parlor and dining cars. The total mileage of railways covered by contracts for the operation of cars

Roosevelt, Mr. Bird believes in "a square deal for every man." And every man who comes under Mr. Bird's eye in the cause of his professional duties gets "a square deal," as A. C. Bird's personal record has always been "clean as a hound's tooth"—to use another of our President's expressive similes.

All his life Mr. Bird has been a worker. The gospel of work has found no more strenuous advocate.



A. C. BIRD.

Mr. Bird, nevertheless, has always found time to secure the exercise necessary to keeping in good physical trim, for preserving the "sound mind in the sound body." So in Mr. Bird's case, at least, there is no fear of the sword wearing out the scabbard. Unlike some railroad magnates he never has to spend long weeks at continental spas to obtain a new lease of health. Mr. Bird is now in the prime of life holding perhaps the most responsible position among all the captains of industry in this busy city.

Alexander F. Banks, president of the Elgin, Joliet & Eastern Railroad and of the Chicago, Lake Shore & Eastern Railroad, has been a railway man all his life, having begun his career as office boy in the contracting freight agent's office of the St. Louis & Southern Railway. He is a young man, but is as well known in railway circles as many of his veteran colleagues.

Mr. Banks was born on a farm in Crawford County, Indiana, but from his very childhood he evinced inclinations for something different from agricultural pursuits. Two years after entering his duties as office boy he was promoted to contracting agent and was one of the youngest agents employed by the road. His first station as agent was that at Evansville, Indiana. After one year he became traveling and general agent of the Continental Fast Freight Lines. In that capacity he served eight years. From January 1 to September 1, 1888, he was general agent of the Iowa Central Railroad at Peoria, Illinois, and became general freight agent of the same road in September, 1888. Mr. Banks' steady rise continued. May 1, the following year, he took the positions of general freight and general passenger agents of the Iowa Central. In March, 1890, he was made traffic manager and remained as such until August, 1893, when he resigned to accept the postion of traffic manager of the Elgin, Joliet & Eastern Railroad. In May, 1899, he was appointed traffic manager also for the Chicago, Lake Shore & Eastern Railroad. In May, 1901, he was elected to his present position. Mr. Banks, although an indefatigable worker in his office, is one of the pillars of some of the representative clubs of Chicago and Evanston, Illinois, residing

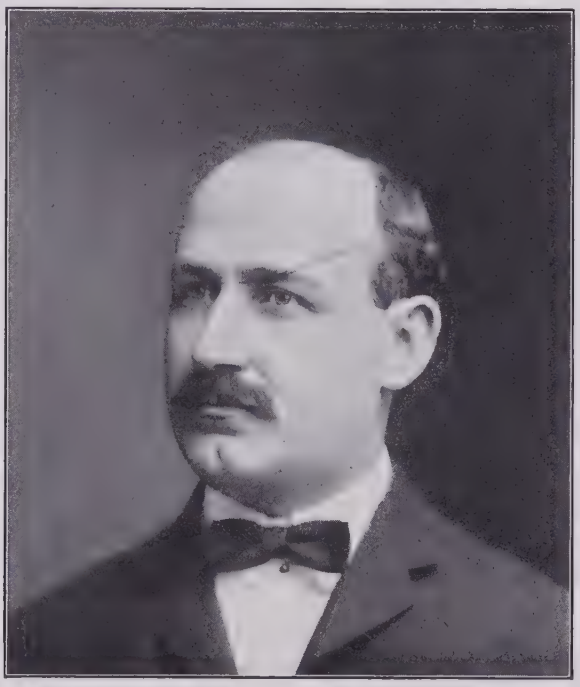
ALEXANDER F. BANKS.

in the latter place. He is a member of the Union League Club, Chicago Athletic Association, Mid-Day Club, Glen View Golf Club, the Country Club at Evanston and the Evanston Club.

John C. Fetzer, prominently identified with real estate, financial and public affairs of Chicago, was born in Clarion, Pennsylvania, June 13, 1865. When he was three years old his parents moved to Ottumwa, Iowa, and in that city Mr. Fetzer spent his boyhood days. His father, William H. Fetzer, who was a lawyer, was

active for twenty years in Republican political affairs of Iowa.

After graduating from the Ottumwa High School in 1881, Mr. Fetzer went to Omaha as assistant to the president of a large wholesale implement concern. He remained there until 1895, when he came to Chicago to accept the position of manager of the McCormick estate. As representative of the estate, he was largely instrumental in the organization of the International Harvester Company, of which the McCormick and Deering companies were leading factors.



JOHN C. FETZER.

Mr. Fetzer also aided in the organization of the Jackson Trust & Savings Bank, the First Mortgage & Bond Company and the Illinois Surety Company. He acted for some time as vice-president of the two first-named concerns and is still a director in the Illinois Surety Company. In 1903 Mr. Fetzer was appointed a member of the board of education and has served much of the time since then as chairman of the finance committee. In the early part of July, 1905, he was elected vice-president of the board. He is also a director of the Fort Dearborn National Bank, the Protection Mutual Fire Insurance Company and the Keystone Mutual Fire Insurance Company.

Besides being brought prominently before the public as a member of the school board, Mr. Fetzer has come to public attention as managing receiver of the Union Traction Company. Judge Grosscup, in whose court the affairs of the company have been administered for several years, appointed Mr. Fetzer to this position February 15, 1904, and he retained it until his resignation May 15, 1905. While he was managing receiver more than $2,000,000 was spent in rehabilitating the North and West Side Traction systems.

Mr. Fetzer resides at the Palmer House. As a resident of the First ward, and active Republican worker, Mr. Fetzer has devoted much time to elevating the tone of politics in the district. He is a life member of the Hamilton Club, a member of the Chicago Yacht, Chicago Athletic, Hinsdale and Hinsdale Golf clubs, and also a member of the Chicago Real Estate Board.

Richard Fitzgerald, vice-president and general superintendent of the Chicago Junction Railway, began his career as a telegraph operator. Besides being vice-president and general superintendent of the Chicago Junction Railway, he is president of the Chicago Refrigerator Car Company, and a director in the Fort Dearborn National bank.

Mr. Fitzgerald was married in 1881 at Shannon, Illinois, to Miss Gertrude Newcomer. They have two children, Marie and Gertrude. Mr. Fitzgerald is a thirty-second degree Mason, a Knight Templar, member of the Washington Park Club, Midlothian Golf Club, Union League and Chicago Athletic clubs. His residence is the Kenwood hotel. Mr. Fitzgerald is forty-eight years of age.

RICHARD FITZGERALD.

Alonzo Clark Mather. As the name Pullman is a synonym for the sleeping car, that of Mather is indissolubly associated with the stock car. What Pullman did toward revolutionizing the system of travel for

men, Mather's inventive genius and humane impulses led him to attempt and successfully accomplish for the amelioration of the condition during transit of the dumb brute.

The Mather Humane Stock Transportation Company, of which Mr. Mather is president, is the agency through which is carried out on most of the railroads of the United States and Canada the objects which the inventor of the improved stock car sought to accomplish when in 1881 he designed and built the first sample of the new method of the stock transportation.

In that year while on a trip east, Mr. Mather was delayed twelve hours through a wreck. Beside the car occupied by him was a train of cattle cars of the type then in use, in which were five dead steers and several maimed and bleeding ones. The animals had met their deaths or injuries through the efforts of one large and powerful animal to force his way from one end of the car to the other in a search for food and water. It occurred to Mr. Mather that there should be some way to transport cattle and avoid such conditions, and that if an improved method could be devised, it would be humane, and at the same time save loss by death and shrinkage in weight and delay in reaching market, if a system of feeding without stopping could be designed.

As a result of thought on these lines, Mr. Mather designed and sketched a car in which stock could be separated, fed and watered in the car. Obtaining a patent on the invention, he started out to induce a railroad to build such a vehicle. The railroads, however, declined to invest the money required, preferring to leave the cost to be met by individuals. Mr. Mather expended a large sum of money before he succeeded in producing a car after his designs which would stand the hard usage. Experience taught him also to do away with separate compartments, as the cattle rode easily together as long as movement in search of food was unnecessary. When the first improved car was finally completed, a test was made by transporting cattle from the same farm in the same train, one lot in the old-fashioned car and one in the new improved car. The occupants of the former were unloaded, fed and watered in the yards, while those in the improved car were fed in the car while it stood on side tracks. Careful tests as to weights, live and dressed, after arrival in New York, revealed astonishing results, and subsequent tests made for two years, when the improved cars were in practical operation, disclosed that the saving in shrinkage by the use of the improved method averaged twenty pounds per head, or $1.20 per animal. This saving has represented for a period of twenty-two years the enormous sum of over $25,000,000 on cattle shipped from Chicago alone.

The history of Mr. Mather's establishment of the company bearing his name and the obstacles which had to be overcome to insure the success of the improved method of carrying animals, is the history of most reforms and innovations. But the disappointments encountered and the risks ran were to a large extent compensated for by the recognition of the invention by the contribution to him of an elaborate gold medal by the American Humane Association in 1883, two years after he demonstrated the feasibility of his invention.

Mr. Mather was born at Fairfield, Herkimer County, New York, the son of William and Mary Ann (Buell) Mather, and is a direct descendant of the Mathers who occupied so distinguished a place in the early

ALONZO CLARK MATHER.

colonial history of New England, and produced the famous Cotton Mather, the most remarkable and prominent of the name. The Mather family held for three generations so important a position in Boston that it was said of the men of that name that the snapping of a finger of one of them could produce a revolution.

Alonzo Clark Mather obtained his education in the Fairfield Preparatory School, an institution originally founded by his grandfather, Moses Mather, as a medical college. His father, known as one of the foremost writers and lecturers of his time on natural sciences and chemistry, was president of the institution for nearly a quarter of a century. Finishing his course of study at the Fairfield school, Mr. Mather sought employment in a mercantile house in Utica, New York,

which he left a year later at the age of nineteen to embark in business for himself at Little Falls, New York. Ambitious to invade a larger field, he came West a year later to Quincy, Illinois, and thence to Chicago, where he established himself in the wholesale men's furnishing business on Madison street, and for twenty years he was numbered among the prominent and successful merchants of the city.

In 1895, he disposed of his mercantile business to devote himself exclusively to the growing development of the business of building and running his improved stock cars. The personal and exclusive attention given to the stock car company, was justified in the results which followed. At present there are from one to three trains dispatched daily from Chicago to New York which carry practically no cars except the Mather car. The company owns large numbers of these cars operated over different roads in the United States and Canada, and an injured animal is now rarely heard of where formerly nearly every car reaching Chicago contained dead or crippled cattle.

Mr. Mather's interests are, however, not confined to the Mather stock car, but are varied. He has for many years been identified with a plan for developing the current power of the Niagara River at Buffalo under a system original with himself and he has patented many inventions now in general use, as well as an original idea of commercially utilizing the great tidal and wave power of the ocean, which Mr. Mather believes, are possibilities of the future.

He is a member of the Union League and Marquette Clubs, and an original member of the First Regiment, Illinois National Guard, his connection with the latter dating from the period when it had its armory over a store on Lake street.

Thomas Eugene Mitten, president of the Chicago City Railway Company, is a descendant of one of the oldest families in Sussex, England. He is the son of George and Jane Mitten, and was born at Brighton, Sussex, March 31, 1865. There he received his education. He was about fifteen years of age when he emigrated to the United States, remaining on a farm until 1884, when he entered the service of the Chicago & Eastern Illinois Railroad Company as telegraph operator. He successively filled for this and other railroads the positions of freight and ticket agent, train dispatcher, trainmaster, and adjuster of claims, until 1893, when he accepted the position of general superintendent of the Denver, Lakewood & Golden Railroad, in Colorado. One of the first moves of this company, under his management, was the construction and electrically equipping of its suburban lines.

In 1895 Mr. Mitten became connected with the Milwaukee street railway, during a period when a most bitterly contested strike was on. As a street railway superintendent, his administration was eminently successful, and his energy, firmness and tact, together with his manner of handling this strike, brought him into prominent notice, and secured him the position of general superintendent of that railway system.

It was during the Pan-American Exposition at Buffalo in 1901, however, that Mr. Mitten first had an opportunity to display his superior qualifications as a railroad manager. Selected as one who had a record of being competent to handle large traffic, Mr. Mitten was made general superintendent of Buffalo's Allied Street Railway companies, and the immense crowds which attended the exposition were so satisfactorily

THOMAS EUGENE MITTEN.

cared for as to excite the admiration of the public as well as the local New York press.

In recognition of his executive ability and results secured by him, Mr. Mitten was made general manager of the International Railway Company of Buffalo, in December, 1901, which position he filled most acceptably until February, 1905, when he resigned and accepted the position of first vice-president and managing director of the Chicago City Railway Company, which position he filled until July, 1905, when he was elected president of that company.

Mr. Mitten is one of the best equipped railroad men in the country. As a general manager he had few equals. Executive ability never had a more thorough exponent than is shown in the make-up of Mr. Mitten, who possesses the happy faculty of winning the confi-

dence and respect of his employees, toward whom he literally applies the Biblical injunction of "doing toward others as he would be done by." His well-established reputation for absolute fairness and impartiality in treatment of employes, has won for him the respect, confidence and loyal support of his subordinates.

For a number of years Mr. Mitten has given leading street railway systems of the country specialized services of the highest character, coupled with integrity of character, fertility in resources, the ability to create and carry out new ideas, admirable executive powers, and an unfailing gift of doing the right thing at the right time. He is in the prime of life, untiring in zeal and energy, and unites in his official administration all the qualities of the progressive business man and the railroader. Judging by his past career, he is eminently fitted for the hard and complex duties that will be required of him as the operating head of a system having to handle such an immense traffic as is enjoyed by the Chicago City Railway.

Mr. Mitten is a member of the leading clubs in Chicago, Buffalo and New York City, as well as the Lafayette Lodge, F. & A. M., of Milwaukee; a thirty-second degree Mason, and a Knight Templar, belonging to Ivanhoe Commandery.

Mason B. Starring has risen from the position of clerk to general manager of the Chicago City Railway Company, in a period of fifteen years. A long line of sturdy American ancestors who have participated in the upbuilding of the Nation since its inception, combined with his own ambition and concentration have contributed to his success. Mr. Starring was born in Chicago, May 8, 1859. His father was general baggage agent of the Chicago, Burlington & Quincy Railway, and invented the system of checking baggage now in vogue in this country. Among the first settlers in the New World were members of the Starring family, who came from Holland. Starrings fought in the Revolution.

Mr. Starring graduated from the old Central High School, and at the age of eighteen years entered the baggage department of the Chicago, Burlington & Quincy Railway. At the age of twenty years he had become a general officer of the company, being made head of the baggage department to succeed his father. Until 1885 Mr. Starring continued in the employ of steam railways, part of the time being general baggage agent of the Pennsylvania Company. From 1885 to 1888 he engaged in business for himself, settling in Iowa as a banker and grain dealer. In 1888 he entered the office of the president of the Chicago City Railway Company as a clerk. He studied law at night, was admitted to the bar, and in 1894 was made assistant general counsel of the Chicago City Railway, under Julius S. Grinnell. At the death of Mr. Grinnell in 1898 Mr. Starring was made acting general counsel of the railway company. In 1903 his title was changed to general solicitor. Since May, 1904, Mr. Starring has been a director and general manager of the company.

His wife was Miss Helen Swing, daughter of the late Prof. David Swing, perhaps the greatest liberal and independent preacher Chicago ever knew. The Starrings' elder son, who is seventeen years old, is a namesake of his famous grandfather. The younger son, fifteen years old, is named after Mr. Starring. The Starrings live at 568 East Division street in the winter and at Lake Geneva, Wisconsin, in the summer. Mr. Starring is a member of the Chicago, Calumet, Washington Park and Lake Geneva Country clubs. He is one of the convention committee of the Chicago Commercial Association, and a member of the Sons of the American Revolution.

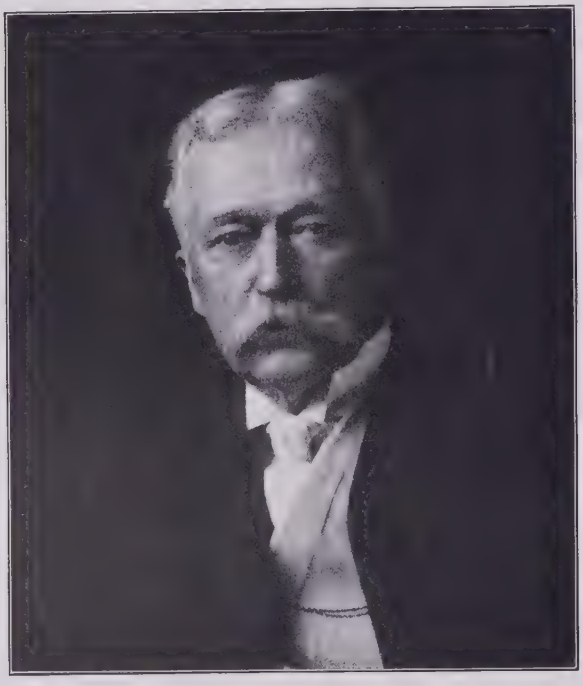
MASON B. STARRING.

Dwight Foster Cameron's career admirably illustrates the opportunity for success the poor country boy has in this country. He left his father's farm in New York state in the fifties and settled in Illinois with $40 as his worldy possessions, but endowed with determination and ambition inherited from a long line of Scottish ancestors. To-day he is president of the South Chicago City Railway Company and the Hammond Whiting & East Chicago City Electric Railway Com-

pany, and a very capable and successful lawyer, although not now in active practice.

Until he was sixteen years old Mr. Cameron remained on his father's farm in Madison County, New York, near the village of Peterboro, where he was born July 28, 1834. He was a big, active boy and when he was sixteen years old did the work of a full-grown man. His schooling was limited to the winter terms in the district school, until he was sixteen years old, when he began a course at Peterboro Academy. He remained here four years, paying his way with money he earned himself. After young Cameron was eighteen years old he taught school in the winter to make his expenses.

At the age of twenty, completing his course at the academy, he left home and started out for the West as



DWIGHT FOSTER CAMERON.

the pioneer of the family, all of the members of which later followed him. He reached Ottawa, Illinois, and determined to settle there. After a few months' work in a bank he began to study law in the office of Glover & Cook. Young Cameron began to practice law before the justices when he had been in the law office a month. In 1858 he was admitted to the bar. General W. H. L. Wallace, Oliver C. Gray and Washington Bushnell examined him, and the late George C. Campbell, who afterwards became a well-known corporation lawyer.

Mr. Cameron was a successful lawyer from the start. He had no connections except those of his own making, but hardly any time elapsed before he had a good and paying practice. When he was thirty years old he became the attorney and a director of the Ottawa, Oswego & Fox River Valley Railroad, and took part in promoting and building its line, which started at Streator and ran to Geneva. It was planned to compete with other roads for the traffic of the towns in the Fox River valley, and it finally developed into the Chicago, Burlington & Quincy Railroad. He served as attorney and director of this road from 1864 to 1870, and during this time he did all the law business of the company and tried all its suits, being assisted in only two of them. Its condemnation suits were under a constitutional provision, new at that time, which presented some difficult problems.

He was married in 1858, the year he was admitted to the bar, to Fanny E. Norris, daughter of George H. Norris, a banker of Ottawa. Their children are Captain George H. Cameron, Fourth United States Cavalry, Mrs. Williston Fish, wife of Mr. Williston Fish of the Union Traction Company of Chicago, and the Rev. Dwight F. Cameron, Jr., of Miami, Florida.

In 1870 Mr. Cameron came to Chicago, where he has since been actively engaged in business. In 1892, in connection with the late Columbus R. Cummings, he built the South Chicago City Railway, and thereafter developed the Hammond, Whiting & East Chicago Electric Railway in connection with it.

The Chicago & Milwaukee Electric Railroad, as shown on the map on the following page, connects twenty-two cities and towns, having a population of 150,000, with Chicago, a city of over 2,000,000.

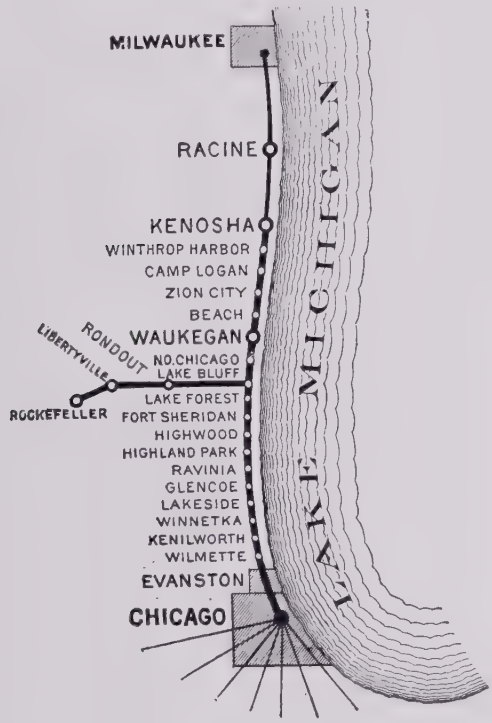
The territory through which this road operates and the character of construction are considered by competent judges to be the best in America.

The original line was built in 1895 and 1896 from North Chicago to Waukegan, and was known as The Bluff City Electric Street Railway Company. In 1898 the line was extended south to Highland Park and the name changed to The Chicago & Milwaukee Electric Railroad Company. It met with such favor that the next year the connection was made south to Evanston and through business was established on August 10, 1899.

In 1902 the extension from Lake Bluff to Libertyville was completed, and two years later was extended west to Rockefeller. Early in 1905 the extension north of Waukegan was begun, and formal opening of the line to Zion City taking place August 26. Work on the extension further north is being continued and in the fall of this year (1905) will be completed to Kenosha.

Among the towns reached by the road now are: Evanston, Llewellyn Park, Wilmette, Kenilworth, Winnetka, Lakeside, Glencoe, Ravinia Park, Highland Park, Fort Sheridan, Lake Forest, Lake Bluff, Waukegan, Libertyville and Rockefeller. It will soon be possible to take a continuous ride by trolley from Chicago to

Milwaukee. The fare is low and the trip cool and comfortable in summer and warm in winter. The cars of the electric road being of the latest pattern and having all the modern equipment, they run with the smoothness and ease of a Pullman coach. This excellent service has done much to develop prosperous suburban towns and magnificent summer homes, and country clubs and recreation grounds located in this section. On stretches of the road a speed of fifty miles an hour is maintained. Among the exclusive country clubs which have their grounds along the line of The Chicago & Milwaukee



Electric Railroad are the Evanston Golf Club, Glenview Golf Club, Kenilworth Country Club, Wilmette Country Club, Skokie Country Club, Exmoor Country Club, Onwentsia Club and Waukegan Country Club.

The United States Government has appropriated $300,000 as a beginning of a naval station to be located at Lake Bluff. The site for the training station comprises 350 acres, and when completed the Government will have expended at least $2,000,000 on the buildings and improvements contemplated.

Fort Sheridan has always been one of the attractive features along the North Shore, being one of the finest military posts in the country. It offers attractions to visitors at all times; daily drills in the morning and band concerts in the afternoon attract large crowds. Picnic parties are allowed on certain parts of the reservation, which accommodates a complete infantry regiment, four batteries of artillery and four cavalry troops.

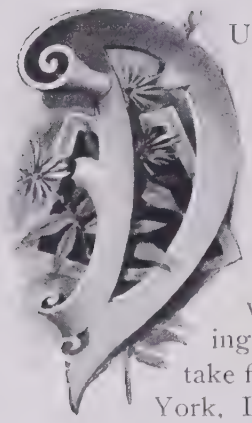
The Chicago & Milwaukee Electric Railroad makes a specialty of providing cars for picnic parties during the summer. Many take advantage of these opportunities to visit the beautiful groves and woodland dells along its route. The city transportation lines connect with the electric road at Church street in Evanston.

The general offices of The Chicago & Milwaukee Electric Railroad Company are at 108 La Salle street. The officers are A. C. Frost, president; H. S. Oakley, vice-president; George M. Seward, secretary and treasurer. The directors are: A. C. Frost, George M. Seward, H. S. Oakley, Joseph E. Otis, all of Chicago, and H. C. Osborne of Toronto, Canada. The operating offices and power plant are located at Highwood. Ever since the road was started the roadbed, overhead construction, power plant, sub-stations and equipment have all been maintained in a high state of efficiency. During 1904 and 1905 the power plant was enlarged to more than double its former capacity. It is the ultimate plan of the road to have its right-of-way entirely confined to its own property. So rapidly is the country building up along the line that every effort is being made to secure the private right-of-way before the value of the property will make such a plan prohibitive by reason of the extensive improvements going in all along the line. Over a million dollars has already been spent by the company for its private right-of-way, which, in time, is to be a four-track system. All the improvements that are being put in along the line are of the most permanent and substantial character.

The rapid growth of the company is best shown by the steady increase in the net earnings for the past five years. The net earnings for 1900 were $81,169; for 1901, $97,156; for 1902, $110,746; for 1903, $193,619; and for 1904, $285,617, this being an increase of 250 percent in five years. The traffic during 1905 has been steadily on the increase and the earnings will undoubtedly go well over the $300,000 mark.

CHAPTER XIX.

BANKS OF CHICAGO.



URING the first century of its existence Chicago has grown from a frontier trading post, where the mediums of exchange were pelts and powder and ball. to the second financial center of the United States. To-day its banking institutions are exceeded only by New York in capital invested, resources, deposits and clearings. But three cities in all the world take financial rank ahead of Chicago—New York, London and Paris. New York was nearly two centuries old before Chicago became distinguishable upon the map of the United States, while London and Paris had become centers of population over a thousand years before.

The greatest growth of Chicago's financial interests has taken place in the last forty years. When the Chicago clearing house was organized in 1865 its business hardly exceeded $400,000,000 a year. It is now over $9,000,000,000, an increase of over 2,100 per cent. In the tremendous growth and development that followed after the great fire the banks of Chicago led. Chicago's clearing house was organized in 1865, but its records for the local banks date back only to 1873. For that year the thirty national, state and private banks had a capital of $11,940,700. On May 31, 1905, the forty-nine national and state banking institutions of Chicago were capitalized for $48,350,000, an increase in thirty-three years of $36,409,300. The surplus and profits of all the banking institutions of the city in 1873 were $4,222,010. For May, 1905, they were more than nine times as great, reaching the immense total of $38,273,341. In the same year after the fire the banks loaned $36,951,998. They now carry over tenfold that amount, the loans in May of this year aggregating $403,673,162. But in no way is the wealth and progress of the city so emphatically indicated as in the increase in deposits in the banks since the fire. The first clearing house statistics give the total bank deposits for Chicago at $40,600,522. They now total $634,935,642.

The first step in Chicago's financial history was taken when the Indian traders adopted a rude banking system by issuing a kind of currency in the nature of written promises to pay for the pelts the Indians brought to the fort. Every scrap of that paper was redeemed and passed current at its face value.

To Gurdon S. Hubbard may be given the credit of being Chicago's first banker, and he lived to see the trading post lying under the protecting stockade of Fort Dearborn, grow to a city of a million souls. He had funds on deposit at Buffalo, and his bills of exchange were always honored. He was able to do his neighbors an important neighborly service by selling them Buffalo exchange, and in those days Buffalo was the metropolis of the Middle West, to use a modern term. All through the East such bills were acceptable money remittances. The first bank in Illinois, called the Bank of Illinois, was located at Shawneetown, which, for all practical purposes, was about as far from Chicago as Manila is to-day. Its charter was granted two years before the state was admitted into the Union. It was renewed by the state legislature, the state itself becoming a partner in the business. That institution failed, involving considerable loss to the state. Branches were established, but Chicago was too small to have even a branch until late in the year 1835, when the Chicago Branch of the Illinois State Bank was announced. That was the first real banking house in the history of the city. It was located at the corner of La Salle and South Water streets. W. H. Brown, whose name is fitly borne by one of the public schools of the city, he being eminent in the promotion of our educational system, was the practical head of the bank, having the title of cashier. The deposits for the first three months averaged about seven hundred dollars a day. It flour-

ished until the spring of 1837, when the great crash which came to the whole country brought distress. The state undertook to rescue the bank by plunging into a grand system of internal improvements, but the inevitable bankruptcy came to a head in 1843, and the Chicago branch went out of existence finally in 1843. Even before this it had been reduced to an agency, the branch proper being removed to Lockport. The actual currency of the period from 1837 to 1843 was largely made up of city and private scrip, with a very considerable

GARFIELD PARK GREENHOUSE—INTERIOR

infusion of bank notes issued under the banking laws of other states.

The first really great banker of Chicago was George Smith, a preëminently "canny" Scotchman, a man of remarkable business ability and unimpeachable integrity. Not a dollar of the millions of paper bearing the signature of "Geo. Smith" ever failed to be redeemed on demand. No run ever broke him. His system was fiercely assailed as illegal, but it had no taint of dishonesty. Private banking, as conducted by him in Chicago for twenty years, while it yielded him a great fortune, was of incalculable benefit to Chicago and the region round about.

It was in the spring of 1834 that Mr. Smith reached Chicago to seek his fortune. He found it and returned to London to enjoy it in 1860, where he died a few years ago. He belonged to Milwaukee almost as much as Chicago, for his banking career really began with securing from the legislature of Wisconsin in 1839 a charter for the Wisconsin Marine & Fire Insurance Company, authorized to receive deposits and issue "certificates" to the sum of $1,500,000. That institution had its headquarters at Milwaukee, but Mr. Smith resided in Chicago, where he conducted a private bank under the name of George Smith & Co. For twenty-one years he was the leading banker of the West, and the certificates which bore his name were always redeemed on demand. It was a great thing for Chicago banking to have its foundations laid by so sound and sagacious a banker.

Many of the banks, private and chartered, which were doing business here when the crash of 1857 came, went down with the general crash. Others went out voluntarily and still others reorganized under the national bank act. J. M. Adsit, who began as a private banker in 1846, continued the business thirty years and then retired, the last of the private bankers who survived the storm of 1857. Of the banks then doing business under state charters all are gone and have been for many years, except the Merchants' Loan & Trust Bank, which declined to go into the national system, and has always been one of the great banks of the city. During the period of "wild-cat" banking Chicago made, as a whole,

a good banking record. Besides the bankers named honorable mention should be made of J. Young Scammon, J. H. Burch, E. J. Tinkham, R. K. Swift, H. A. Tucker and Solomon A. Smith.

The national bank act dates from March 25, 1863. It found Chicago, in common with the country generally, in woeful need of a larger and, above all, a better medium of exchange. The legal tender notes of the government were utterly inadequate to the currency needs of trade. The country had fully recovered from the depression which began almost simultaneously with the year 1857, and was rendered more pronounced during the early period of the war. Many of the banks whose bills circulated largely here when the Civil War began were located in the South. Those which continued to do business suspended specie payments. It is not too much to say that the national bank system was born of necessity. The government needed the money, which would have to be paid for its bonds, to serve as a base of circulation, and the people needed the bills for use as a sound medium of exchange. Still for more than a year the change from state bank notes to a national bank currency went on slowly. Finally, patience exhausted, the Chicago Board of Trade announced, in a notice signed by all the leading members of that body, and dated May 9, 1864, "that on and after the 15th inst. the base of transactions, either buying or selling, should be legal tender notes or their equivalent." Three days later the bankers of the city announced that "on and after Monday, May 16, 1864, we will receive on deposit at par, and pay out at par only, legal tender notes, national bank notes and the notes of such other banks as redeem at par in the city of Chicago." That ended the era of wild-cat money in this city. The national bank system received a veritable boom. By the close of 1864 Chicago had seven national banks—namely, the First, Second, Third, Fourth, Fifth, Mechanics' and Northwestern. Of these only three survive, the First, Northwestern and Fifth, the latter under a change of name. An eighth, the Manufacturers', long since defunct, was organized about that time. One of the newspapers of the period remarked at that time: "One million of dollars a day goes into the country from Chicago to the producers. Well may the bankers rejoice that the days of rag money are over."

On those days, and for many years after, there was profit in the national bank circulation, and it was issued as the needs of business required, but of late years the policy of our banks has been to put in circulation only the minimum amount of their own notes. Bonds are so high and the rate of interest so low that there is no profit in it.

The adoption of the national bank system caused a few bank failures, but from the close of 1864 to the great fire of October 9, 1871, the banking business of Chicago went on prosperously. The seven national banks had become seventeen, and there were also ten private banking institutions. The national bank capital at that time was $6,800,000, not including the undivided surplus, amounting to $2,715,000. The total bank capital of the city was $12,250,000.

In this connection should be given a memorable, but little remembered, episode. While yet the ruins of the smoking city were hot and no bank vaults were opened, the bankers of the city held a conference. The question was, How shall we open and what per cent of deposits shall be paid on demand? A committee was appointed. No one on that committee dreamed of paying dollar for dollar. Some said 15 per cent, others 25 per cent and still others a little more. It looked as if the 25 per cent plan would be adopted as a compromise. Suddenly, but in a very quiet way, the president of the Merchants' National Bank, Chauncey B. Blair, remarked, without rising from his chair: "Gentlemen, I always like to agree with my brother bankers, and in ordinary matters would yield to the majority, but when it comes to paying my debts or the debts of my bank I have only this to say, I have always paid in full and always shall if I can. Perhaps I shall not be able to pay even 25 per cent. The vault is still closed. It may contain only ashes, but I shall do the best I can to meet all the demands of my depositors." That was a thunderbolt. It created consternation. An adjournment was had without action, in the hope of convincing Mr. Blair that the banks ought to stand together.

The next day the comptroller of the currency put in an appearance, and without knowing what Mr. Blair had said notified the national banks that they must pay in full, or he would not let them open at all. He was inexorable. When the country correspondents and local depositors found that this decree had been issued they were greatly relieved, and when the banks did open there was no run on them. The vaults all stood the fire test, and in a very short time the deposits were larger than ever.

The stringency which began in the fall of 1873 gradually developed until it weeded out several national banks, without, however, weakening the system; but the failure of the State Savings Institution, the leading savings bank of the city, which occurred in 1877, and of some minor banks, produced a far-reaching effect. It seemed as if the very foundations of Chicago's confidence in savings banks were shaken and overthrown. For years this branch of banking was depressed. The recovery from the shock was slow. It was not until the state adopted a policy of supervision of all banks doing business on state charters that confidence was regained.

When the bank panic of 1893 swept over the country it toppled over a few weak banks, but it did not work anything like a general havoc. The Chicago clearing house showed most excellent coolness. The storm was

CONDITION OF CHICAGO BANKS JUNE 13, 1873.

	Capital.	Surplus.	Undivided Profits.	Loans and Discounts.	Cash and Checks.	Deposits.
First National	$1,000,000	$400,000	$154,339	$3,018,199	$1,113,763	$3,731,059
Second National	100,000	50,000	20,396	624,448	254,697	970,581
Third National	750,000	200,000	107,004	2,753,796	1,223,511	3,912,664
Fourth National	200,000	10,000	14,451	400,735	175,548	425,491
Fifth National	500,000	100,000	56,739	1,193,053	239,781	1,157,921
Merchants National	500,000	400,000	10,180	1,702,631	429,703	1,604,116
Northwestern National	500,000	500,000	49,379	1,400,031	429,438	1,016,411
Manufacturers National	500,000	100,000	7,249	1,336,732	451,423	1,482,598
Mechanics National	250,000	50,000	99,285	882,689	229 340	928,549
Commercial National	500,000	200,000	59,634	1,450,764	598,372	1,632,836
Union National	1,000,000	200,000	101,975	3,567,525	1,769,741	5,351,032
City National	250,000	110,000	3,295	955,317	155,421	367,774
Merchants Savings Loan and Trust	1,500,000	100,000	581,463	3,509,581	225,959	1,721,130
Corn Exchange National	500,000	50,000	34,459	1,349,603	379,801	1,444,429
National Bank of Commerce	250,000	11,000	11,796	612,544	230,215	767,653
Traders National	200,000	40,000	21,896	478,889	332,893	669,045
Preston Kean & Co	100,000	.....	28,325	683,297	226,405	1,187,235
Hibernian Banking Association	111,000	.....	81,221	621,337	25,971	755,954
Cook County National	500,000	10,000	34,633	1,164,761	436,122	1,460,151
J. M. Adsit	90,000	1,528	.....	130,817	60,990	150,805
Central National	200,000	.....	8,679	225,202	98,100	187,398
National Bank of Illinois	500,000	10,000	26,432	929,245	249,872	847,877
Prairie State Loan and Trust	150,000	7,500	33,723	591,385	38,236	813,858
German National	500,000	100,000	19,281	1,205,953	418,860	1,215,881
Bank of Montreal	100,000	.....	21,221	1,449,970	85,006	241,903
Franklin Bank	100,000	.....	3,449	331,952	45,981	313,326
International Bank	200,000	118,793	6,306	495,718	106,288	351,156
Hide and Leather	259,700	1,818	4,539	385,920	94,784	232,805
Union Trust	125,000	32,060	16,283	449,807	91,282	614,100
State Savings Institution	500,000	.....	10,609	3,050,045	412,327	4,445,770
Totals	$11,940,700	$2,802,709	$1,619,301	$36,951,998	$10,620,330	$40,600,522

severe, but not desolating. There was an admirable spirit of mutual helpfulness shown all through the trying ordeal. While some weak banks were obliged to go out of business, that panic had at least one good effect in Chicago. It is hardly too much to say that it put an end to private banking. Individuals and partnerships doing a banking business felt constrained by the pressure of self-preservation to organize under the state banking act, thus sharing in the strengthened public confidence which results from state inspection.

In the years from 1890 to 1899 Chicago banks passed through trying days to end in a period of great prosperity. In that time Chicago emerged from the provincial in banking to the metropolitan, and became the depository of funds for large flotation enterprises. In this latter particular, however, it must be said that the Illinois Trust and Savings Bank stood as the particular representative.

The first instance in which the banks of Chicago acted as a depository of trust funds in the matter of company promotions was at the time of the floating of the Glucose Sugar Refining Company, with a capital of $40,000,000. In this promotion the principal state bank mentioned received jointly with a New York institution the underwriting deposits. Next followed the National Biscuit Company, with a capital of $55,000,000, the principal floating of which was done in Chicago. Then during the active promotion year of 1898 Chicago acted either in whole or in part as trustee for enterprises floated with a total capital amounting to $304,000,000.

These flotations included some of the most widely known trusts in the country. Among them, in addition to the Glucose Sugar Refining and National Biscuit companies, were the American Steel & Wire Company, the American Tin Plate Company, the National Steel Company, the National Carbon Company, the Chicago Union Traction Company and the American Linseed Company.

In addition to furnishing a good portion of the capital for these enterprises, Chicago, through its banks, became a large lender of money, not only in New York but in London and Berlin. When, in 1898, money was stringent in Germany and the bank rate was advanced to 6 per cent, Chicago banks carried credits of perhaps $10,000,000 in the German capital.

In 1899, when through the fluctuations of the New York stock market and the heavy transactions on that exchange, money advanced rapidly, Chicago was accustomed to loan daily from $2,000,000 to $8,000,000 on call, an experience which five years previous had been unknown.

An evidence of the esteem in which Chicago banks were held by other Western institutions was afforded in the period of the Spanish-American war in 1898, when there was a general disposition to withdraw deposits and strengthen reserves. Between February 12, 1898, and April 30, 1898, the deposits of the New York associated banks showed a decrease of $80,180,500. The withdrawals began immediately after the explosion of the Maine, February 15, 1898, and ended with the battle of Manila, May 1, 1898. New York bank deposits in that time decreased for $738,683,800 to $658,503,300.

While country institutions were drawing their deposits from New York banks they were increasing their balances with Chicago institutions. According to official statements there were in Chicago institutions about February 1 total deposits of $266,481,246. According

to similar statements three months later there were, about May 1, $272,934,242. There was increase therefore, of $6,452,996.

This preference on the part of country banks for Chicago institutions as depositories for funds rather than the New York banks probably grew out of the fact that in 1893, when the industrial depression began, New York institutions issued clearing house certificates.

The growth in deposits by years of Chicago banks from 1890 to May 30, 1905, are shown in the following table:

CHICAGO BANK DEPOSITS.

December.	National.	State.	Total Both.
1890	$ 94,470,800	$ 35,753,854	$130,224,654
1891	118,154,700	44,442,399	162,597,099
1892	130,058,550	58,363,226	188,421,776
1893	122,354,131	56,854,484	179,208,615
1894	129,626,653	67,062,067	196,688,720
1895	120,705,569	72,686,890	193,392,459
1896	110,298,369	66,963,345	177,261,714
1897	150,042,071	90,502,701	240,544,772
1898	188,131,143	113,958,404	302,089,547
1899	195,346,694	132,036,352	327,383,046
1900	231,386,146	158,238,138	298,624,284
1901	262,797,936	184,889,793	447,687,729
1902	265,136,636	209,921,612	475,058,248
1903	276,048,884	234,306,041	510,354,925
1904	299,588,196	297,070,456	596,658,652
May, 1905	315,077,903	319,857,721	634,935,624

From the foregoing table it will be seen that the state banks have been steadily gaining on the national banks in the volume of deposits since 1890, and at the last call in May, 1905, were ahead. This development has been due probably in a large part to the latitude which the state laws offer with reference to reserves, compared with the national banking act.

Previous to 1899 the record in the matter of clearings in the history of the clearing house association was made in 1892. After the latter date, or until 1898, Chicago, instead of advancing, went backward, and in 1896 the clearings were but about $100,000,000 better than 1894, the latter being the low year after 1892. The clearings since the clearing house was organized follow:

CHICAGO BANK CLEARINGS.

1865	$ 319,606,228	1887	$2,969,216,210
1866	453,798,648	1888	3,163,774,462
1871	868,030,754	1889	3,379,925,188
1872	993,060,503	1890	4,039,145,904
1873	1,047,027,828	1891	4,456,885,230
1874	1,101,347,918	1892	5,135,771,187
1875	1,212,817,207	1893	4,676,960,968
1876	1,110,093,624	1894	4,315,440,476
1877	1,044,678,475	1895	4,614,979,203
1878	967,184,093	1896	4,413,054,108
1879	1,257,756,124	1897	4,575,693,340
1880	1,725,684,894	1898	5,517,335,595
1881	2,240,329,924	1899	6,612,313,614
1882	2,393,437,874	1900	6,799,535,598
1883	2,517,371,581	1901	7,756,372,455
1884	2,259,680,391	1902	8,394,872,351
1885	2,318,579,003	1903	8,755,553,649
1886	2,604,762,912	1904	8,989,983,764

The days of suspensions, liquidation and consolidations in the last nine years began late in 1896. The most important failure was that of the National Bank of Illinois. A complete showing of the changes immediately prior to and following the failure of that institution follows:

Banks.	Capital.
Central Trust and Savings Bank, suspended first quarter 1896	$ 200,000.00
Dime Savings Bank, suspended third quarter of 1896.	100,000.00
Globe Savings Bank, suspended first quarter of 1897.	200,000.00
Bank of Commerce, principal assets purchased by the Union National Bank, November, 1897	500,000.00
International Bank, purchased by the Continental National Bank, February, 1898	500,000.00
Commercial Loan and Trust Company, purchased by the Royal Trust Company, October, 1898	500,000.00
National Bank of Illinois, suspended, December, 1896	1,000,000.00
Atlas National Bank, voluntary liquidation, first quarter, 1897	700,000.00
Prairie State National Bank, consolidated with Prairie State Savings and Trust Company, August, 1897, under new name of Prairie State Bank	200,000.00
Hide and Leather National Bank, purchased by Union National Bank, December, 1897	300,000.00
American Exchange National Bank, consolidated with the National Bank of America, under new name of America National Bank, Februrary 18, 1898	250,000.00
Home National Bank, voluntary liquidation, January 18, 1898	1,000,000.00
Globe National Bank, purchased by Continental National Bank, November 18, 1898	1,000,000.00
Metropolitan National took over West Side Bank, February, 1899	50,000.00
Bankers National took over Lincoln National, July 1900	200,000.00
Corn Exchange National took over Northwestern National and American National, September, 1900.	2,000,000.00
First National absorbed Union National, September, 1900	2,000,000.00
Corn Exchange National took over Merchants National, March, 1902	1,000,000.00
First National absorbed Metropolitan National, May, 1902	2,000,000.00
Continental National took over National Bank of North America, October, 1904	2,000,000.00
American Trust and Savings took over Federal Trust and Savings, May, 1905	2,000,000.00
Central Trust of Illinois, reduction of capital	2,000,000.00
Decrease in banking capital	$19,700,000.00

But in the meantime there were increases in old capital, as well as new additions. These changes were as follows:

1897-98—		
National Live Stock, $750,000 to $1,000,000	Increase,	$ 250,000.00
Foreman Bros. Banking Company	New Capital,	500,000.00
Home Savings Bank, $5,000 to $100,000	Increase,	95,000.00
Prairie State Savings and Trust Company, under new name of Prairie State Bank, $200,000 to $250,000	Increase,	50,000.00
Western State Bank	New Capital,	300,000.00
1899—		
July—Illinois Trust and Savings	Increase,	1,000,000.00
July—State Bank of Chicago	Increase,	500,000.00
Dec.—First National of Evanston	New Capital,	100,000.00
1900—		
Sept.—Corn Exchange National	Increase,	1,000,000.00
Sept.—First National	Increase,	2,000,000.00
1901—		
Jan.—Chicago National	Increase,	500,000.00
April—Continental National	Increase,	1,000,000.00
May—Hibernian Banking Association	Increase,	500,000.00
Aug.—Commercial National	Increase,	1,000,000.00
Oct.—Illinois Trust and Savings	Increase,	1,000,000.00

1902—
Jan.—Drovers Trust and Savings.....New Capital, $ 200,000.00
Feb — Federal Trust and Savings.....New Capital, 2,000,000.00
March—American Trust and Savings.....Increase, 1,000,000.00
March—Chicago Savings Bank organized.....New Capital, 250,000.00
March—Corn Exchange National.....Increase, 1,000,000.00
March—Western State Bank.....Increase, 200,000.00
March—Stock Yards Savings.....New Capital, 250,000.00
April—Colonial Trust and Savings Bank.....New Capital, 200,000.00
April—Drexel State Bank.....New Capital, 200,000.00
May—First National.....Increase, 3,000,000.00
May—South Chicago Savings.....New Capital, 200,000.00
May—National Bank of North America.....New Capital, 2,000,000.00
May—Central Trust Company.....New Capital, 4,000,000.00
June—National Bank of the Republic.....Increase, 1,000,000.00
Aug.—Bankers National.....Increase, 1,000,000.00
Sept.—Metropolitan Trust and Savings.....Increase, 250,000.00

1903—
Feb.—Hamilton National Bank.....New Capital, 500,000.00
April—Manufacturers Bank.....New Capital, 200,000.00
June—Merchants' Loan and Trust.....Increase, 1,000,000.00
June—Pearsons-Taft Land Credit Company..Increase, 100,000.00
June—Western Trust and Savings.....Increase, 500,000.00
Sept.—Jackson Trust and Savings.....New Capital, 250,000.00
Sept.—Calumet National.....Increase, 50,000 00
Dec.—First Trust and Savings.....New Capital, 1,000,000.00

1904—
June—Hibernian Banking Association.....Increase, $500,000.00
June—Prairie National.....New Capital, 250,000.00
Sept.—Chicago Savings.....Increase, 250,000.00
Sept.—Calumet Trust and Savings.....New Capital, 250,000.00

1905
May—American Trust and Savings.....Increase, 1,000,000 00

Total additions to capital.....$33,895,000.00

It will be seen from the foregoing tables that the changes and combinations of banks have been great during the past decade. The centralization of banking interests has been more than counterbalanced by the starting of new institutions and the bringing of new capital into the field. At the close of 1899 the banking capital since the Illinois National failure, had shrunk over four and a quarter million dollars. In the next five years this had been more than overcome and the net increase since 1896 was over $14,000,000, up to May, 1905.

The condition of the Chicago banks at the time of the call, May, 1905, follows:

CONDITION OF CHICAGO STATE BANKS, MAY 31, 1905.

NAME.	Capital Stock Paid In.	Surplus and Undivided Profits.	Loans and Discounts.	Bonds and Stocks.	Cash on Hand.	Due from Other Banks.	Checks and Other Cash Items.	Savings Deposits Subject to Notice.	Individual Deposits.	Due to Other Banks.	Total Deposits.
American Trust and Savings Bank	$3,000,000	$1,969,687	$18,360,031	$ 4,947,801	$ 4,648,547	$ 4,867,827	$1,467,532	$ 3,004,172	$19,815,855	$ 6,763,344	$29,583,371
Austin State	25,000	39,350	415,691	204,345	56 251	101.209	1,140	380,951	341,434	.....	722,385
Central Trust of Illinois	2,000,000	916,361	7,346,041	1,196,726	498,992	2,676,438	521,599	1,502,126	5,961,205	1,859,879	9,323,310
Chicago City Bank	200,000	157,528	1,055,201	187,832	52,851	330,835	.....	619,326	710,593	.....	1,329,919
Chicago Savings	500,000	65,314	1,161,686	924,349	215,947	167,245	17,278	792,296	1,112,126	31,769	1,936,191
Colonial Trust and Savings	200,000	101,477	1,226,813	77,700	26,603	191,983	136,331	111,303	1,031,321	215,319	1,357,943
Cook County State Savings	50,000	2,417	225,205	50,000	10,425	99,421	14,709	142,338	205,504	.....	347,842
Drexel State Savings	200,000	16,274	850,932	95,125	70,702	85,043	55	336,568	607,316	.....	943,884
Drovers Trust and Savings	200,000	48,094	1,143,696	419,000	45,432	265,161	101	1,521,037	93,290	.....	1,614,327
First Trust and Savings	1,000,000	698,075	11,931,892	7,577,313	608,402	2,087,646	76,689	8,705,746	11,638,397	239,723	20,583,866
Foreman Bros. Banking Company	500,000	627,237	4,594,078	229,653	405,677	1,171,896	97,280	.....	5,371,347	.....	5,371,347
Hibernian Banking Association	1,000,000	1,049,404	12,246,423	2,044,216	886,521	2,939,965	222,858	14,011,030	2,408,769	39,125	16,458,924
Home Savings Bank	100,000	155,785	.....	3,787,000	19,857	513,354	.....	4,064,426	.....	.....	4,064,426
Illinois Trust and Savings Bank	4,000,000	5,948,405	51,069,379	23,808,677	10,842,927	13,170,387	592,309	61,150,514	26,600,686	1,852,635	89,603,835
Jackson Trust and Savings	250,000	56,675	1,047,084	240,169	67,165	180,021	33,223	131,224	1,025,257	124,496	1,280,977
Kenwood Trust and Savings	200,000	14,244	332,865	.....	6,778	8,050	.....	37,946	102,996	.....	140,942
Manufacturers Bank	200,000	11,589	380,566	67,365	14,993	62,166	10,376	72,218	212,603	42,554	327,375
Merchants' Loan and Trust Company	3,000,000	3,617,532	25,704,245	8,890,129	6,641,797	12,018,007	2,148,482	5,238,095	27,634,837	15,944,552	48,817,484
Metropolitan Trust and Savings	750,000	257,748	3,861,516	663,946	233,000	439,032	188,419	697,152	3,715,997	.....	4,413,149
Milwaukee Avenue State Bank	250,000	255,760	2,667,263	303,634	222,809	607,603	73,607	2,554,257	918,476	.....	3,472,733
Northern Trust Company	1,000,000	1,684,022	13,829,196	7,857,111	3,759,256	5,154,700	554,751	9,720,894	17,672,415	1,847,333	29,240,642
North Side State Savings	50,000	6,034	244,630	.....	14,034	85,757	22,927	151,966	159,947	.....	311,913
*Pearsons-Taft Land Credit Company	200,000	5,700	3,262,193	.....	1,137	73,556	.....	.....	2,983,593	.....	2,983,593
Peoples Trust and Savings	200,000	13,510	624,519	3,100	26,750	51,766	399	202,075	361,771	.....	563,846
Prairie State Bank	250,000	73,721	4,006,321	760,225	484,351	527,893	71,763	3,734,513	1,807,341	6,183	5,548,037
Pullman Loan and Savings	300,000	170,613	1,714,380	1,078,095	107,545	437,996	2,173	2,123,468	745,808	.....	2,869,276
Royal Trust Company	500,000	447,335	3,530,703	1,217,137	233,526	912,405	189,097	1,720,022	2,908,687	532,659	5,161,368
South Chicago Savings	200,000	31,875	535,723	160,987	73,476	93,494	.....	265,194	412,883	.....	678,077
State Bank of Chicago	1,000,000	609,543	10,727,233	894,190	991,899	2,032,662	678,203	6,991,350	5,279,545	1,443,629	13,714,524
State Bank West Pullman	25,000	4,643	133,971	26,836	20,573	18,893	.....	107,300	73,467	.....	180,767
Stock Yards Savings	250,000	104,615	1,048,800	632,342	67,339	206,399	7,096	1,441,497	165,865	.....	1,607,362
Union Stock Yards State Bank	200,000	12,448	476,970	.....	36,535	84,849	.....	249,498	210,245	4,312	464,055
Union Trust Company	1,000,000	577,970	6,166,478	1,906,284	420,475	2,714,689	654,935	3,707,601	6,257,836	319,455	10,284,892
Western Trust and Savings	1,000,000	187,170	4,283,333	483,382	96,442	664,448	214,694	873,483	2,736,487	945,169	4,555,139
Total May 31, 1905	$23,750,000	$19,938,655	$196,205,057	$70,734,669	$31,909,014	$55,045,836	$7,998,026	$136,361,586	$151,283,999	$32,212,136	$319,857,721

* Pearson-Taft Land Credit Company does not do a general banking business.

CONDITION OF CHICAGO NATIONAL BANKS MAY 29, 1905.

BANKS.	Capital.	Surplus and Profits.	Loans and Discounts.	Specie.	Other Cash and Treasury Credits.	Individual Deposits.	Due Banks.	Due from Banks and Agents.	United States Bonds.	Other Stocks and Bonds.	Total Deposits.
Bankers	$2,000,000	$1,065,962	$10,471,300	$ 2,352,108	$ 734,377	$ 4,729,583	$10,218,761	$ 3,484,601	$ 50,000	$ 642,484	$14,948,324
Chicago	1,000,000	1,423,345	12,602,653	3,530,000	1,333,166	18,009,505	4,949,319	4,393,080	50,000	2,152 794	29,958,824
Commercial	2,000,000	1,792,123	23,995,870	4,836,667	1,937,316	12,872,133	21,946,850	4,429,780	500,000	2,554,833	34,848,983
Continental	3,000,000	1,232,536	33,128,159	4,699,134	6,230,294	15,543,107	37,129,714	9,400,176	50,000	1,564,293	52,672,821
Corn Exchange	3,000,080	3,561,208	35,105,323	7,603,828	2,171,713	25,412,546	22,756,877	6,638,629	1,000,000	784,960	48,169,423
Drovers Deposit	600,000	274,692	3,609,495	444,958	422,510	2,544,750	2,722,151	1,079,309	50,000	10,093	5,266,901
First	8,000,000	6,113 755	57,498,500	11,514.830	4 946.301	40,009.751	52,565.506	22,917.564	2,107.000	5,973,429	92,575.257
Fort Dearborn	1,000,000	226,614	6,303,188	991,440	814,507	6,243,307	3,341.506	2,039,157	1,025.000	424,400	9,584,813
Hamilton	500,000	141,896	2,097,966	428,651	50,824	1,912 274	1,103,080	603,749	446,686	223,254	3,015,354
Live Stock	1,000.000	1,302,966	6,583,956	530,129	307,596	4,671,382	4,009,478	1,962,924	50,000	110.000	8,880,86c
Prairie	250.000	59,596	593,536	134,944	32,126	502,330	259,030	215,296	261,778	45.000	761,360
Republic	2,000,000	952,610	12,630,548	2,634,051	809,654	9,473,822	8,924,224	3,539,382	207,000	858,941	18,398,046
Calumet	100,000	31,067	568,004	56,037	52,854	722,867	.....	169,872	104,802	.....	722,867
First (Englewood)	100,000	106,770	1,492,220	41.160	36,704	1,598,090	.....	170,583	46.500	56,692	1,598,090
Oakland	50,000	49,536	787,387	35.231	35,595	905,867	93	140.283	12.500	.....	905,960
Total May 29, 1905	$24,600,000	$18,334,676	$207,468,105	$39,833,168	$10,915,537	$145,151,314	$169,926,589	$61.274,385	$5,961,266	$15,401,173	$315,077,903

First National Bank of Chicago. In its new $5,000,000, eighteen-story home, the First National Bank of Chicago is the model institution of its kind in the world. The bank is the oldest national bank in Chicago, and among American banks exceeded in the amount of resources controlled by only three New York institutions.

The bank was organized in 1863 as National Bank No. 8, with a capital of $273,000, and a staff of five employees and officers. It now has a capital of $8,000,000, deposits of $98,000,000, 10,000 depositors and

FIRST NATIONAL BANK.

550 employees. In 1903 it transacted business to the amount of $12,000,000,000, whereas the United States government receipts for the twelve-month ending June, 1904, amounted to little more than $1,000,000,000.

Not only in its general business methods with the public, but in its internal organization, and its dealings with employees has the bank blazed the path for the financial institutions of the country. The arrangement of its official organization according to the general lines of trade is the feature most striking to the person accustomed to doing business with other banking institutions. In other banks, and formerly in this one, depositors and correspondents were classified according to the letters of the alphabet that start their names. Now they are apportioned according to their trade or profession. Twenty-six lines of business are recognized and divided into seven groups, each one in charge of a senior and junior officer. All banking business out of the daily routine of making deposits, securing cash, etc., is transacted through these divisions. Division "A," of which Vice-President David R. Forgan is the chief, meets all persons whose business is: collateral stocks and bonds, grain, flour and feed, meat products, live stock commission, coal, physicians and lawyers. Other lines are grouped in the same manner and the men in each division become specialists and keep in touch with the trades conditions.

For the benefit of the employees, President James B. Forgan has devised a complete pension system, which is supported both by the bank and its employees. On the top floor of the building is a café, where a well-known caterer daily serves lunch to the entire force of officers and clerks at the bank's expense. Another benefit is a savings association that pays 5 per cent interest on deposits up to a certain amount. The institution has a library and a monthly periodical, The Review, containing financial news and office gossip, which circulates among the employees. The bank is ably represented in public with musical, literary, social and athletic organizations from the staff.

The tradition and aim of the institution has been to be everybody's bank, and in this it has succeeded greater than any like institution in the world. New York's largest bank, the National City bank, may show a score of persons transacting business at its counters at the liveliest hours of the day. During banking hours in the First National bank of Chicago, it is not unusual to count 200 customers in the office, and at 2:30 in the afternoon its stairways are crowded like the exits of a popular theater after a performance.

The bank has more than 10,000 regular depositors, and only by its system of organization could be handled the extraordinary multiplicity of items that compose its immense bulk of business. Every day 100,000 entries are made on its books, and 15,000 checks and drafts on other cities are sent out for collection. The in-mail department alone, between the hours of 7:30 and 10:30 each morning, disposes of about 4,000 letters, including deposits in cash, checks and drafts of from $7,000,000 to $10,000,000.

One striking example of the care and system of the bank is shown by the out-mail department. Though the annual business of the bank totals up in the billions of dollars, not a penny must be missing or astray in the daily footings. Economy in postage alone saves the bank from $25 to $30 per day. All letters are mailed after hours. Should a dozen departments find it necessary to write to the same correspondent during one day, every letter will come to the same mail clerk, and all

will be finally forwarded in one envelope instead of paying separate postage for each one.

The main entrance of the First National Bank building was opened to the public May 15, 1905. It is one of the most magnificent buildings in the United States. Its granite walls, facing Dearborn and Monroe streets, rise eighteen stories in majestic simplicity, the only ornamentation being slightly projecting sill courses. A marble hall of Romanic splendor is the interior space containing the bank. The bank occupies the space contained in the first three stories. The aggregate height of these three lower stories is equal to that of an ordinary five-story building. A cornice supported on massive Doric pilasters, forty feet high, inclose the arched openings of the bank proper. Through an archway the main entrance to the main banking room leads into the grand central court. This court with its marble wall and marble seats and crystal plate-glass dome fifty feet above the floor is one of the most imposing interiors to be found in any land. The court measures 60 by 90 feet and is surrounded by an arcade. The main banking room is 230 feet long, 190 feet wide and 47 feet high, fifteen feet of the height facing the court being divided off into a secondary floor. There is one acre of floor space for every story. This space is divided off into offices and corridors, the corridors on every floor extending entirely around the building. The building has a frontage of 231 feet on Monroe street and 192 feet on Dearborn street, the total area being 44,274 square feet. Its height is 257 feet. There are 1,800 windows in the structure and 1,020 doors. These furnish light and egress and ingress to 983 offices. Like a city within itself the building contains its own electric lighting plant, the boilers of 800 horse power furnishing power for the 7,900 electric lights and for the running of the fourteen elevators. There is a two-story basement underneath the structure where are located the power plants, the printing office and other departments.

Before the Chicago fire in 1871, the bank occupied quarters at Clark and Lake streets. After that building was destroyed, it moved to State and Washington streets, where it remained until 1882. It then moved to its present location and the new building of which it took possession was then considered the finest in Chicago. When it was demolished two years ago to make way for the bank's present home it was more modern than many office buildings.

E. Aiken was the first president of the bank. After his death, in 1867, Samuel M. Nickerson succeeded to the office. Lyman J. Gage became cashier of the bank when it was reorganized in August, 1868. In 1882 another reorganization took place, and Mr. Gage advanced to vice-president. A few years later he was chosen president. He resigned this office to enter President McKinley's cabinet as Secretary of the Treasury.

Mr. Nickerson was then re-elected president, but soon afterwards retired to private life in New York City. James B. Forgan, the present chief executive of the bank, succeeded him. The other officers of the First National are:

Division A—David R. Forgan, vice-president; E. S. Thomas, assistant manager.

Division B—George D. Boulton, vice-president; Frank E. Brown, assistant manager.

Division C—Howard H. Hitchcock, vice-president; Charles N. Gillett, assistant manager.

Division D—Richard J. Street, manager; Frank O. Wetmore, cashier.

Division E—Holmes Hoge, manager; Charles H. Newhall, assistant manager.

Division F—August Blum, manager; Herbert W. Brough, assistant manager.

Orville Peckham, attorney; James D. Woley, assistant attorney; Emile K. Boisot, manager bond department; Fred I. Kent, manager, and John J. Arnold, assistant manager, foreign exchange; M. D. Witkowsky, auditor; E. J. Blossom, manager discounts and collaterals; H. A. Howland, manager credits and statistics; William H. Monroe, assistant cashier and manager clerical and bookkeeping department.

The directors of the bank are: Samuel W. Allerton, George F. Baker, John H. Barker, A. C. Bartlett, Geo. D. Boulton, William L. Brown, A. A. Carpenter, Jr., D. Mark Cummings, Charles Deering, David R. Forgan, James B. Forgan, H. H. Hitchcock, James H. Hyde, Harold F. McCormick, Nelson Morris, Eugene S. Pike, Henry H. Porter, Jr., Norman B. Ream, John A. Spoor, Wm. J. Watson, Otto Young.

The Continental National Bank, in its record-breaking growth recently overstepped the $50,000,000 mark in its deposit line and now takes second place among the national banks of this city.

The era of agricultural prosperity and commercial and industrial development which began during the closing years of the last decade and still continues, manifested itself most emphatically in bank clearings and the phenomenal rise in bank deposits. That the Continental National Bank has been keenly alive to the opportunities this condition offered is amply attested to by the fact that in 1895 its deposits amounted to only $8,678,000, while in its report to the comptroller of the currency, January 11, 1905, deposits aggregating $52,000,000 were reported. Through the absorption of the International Bank and the Globe National Bank in 1898, and the National Bank of North America in October, 1904, $16,000,000 of deposits were added. The remainder, or approximately $27,000,000,

represents clean gain through sheer force of the most energetic and intelligent exertions on the part of a progressive and far-sighted management. "Progress" has been the watchword which carried this institution onward in its career and found its scope and expression in the development of every department. No tradition was too sacred to be sacrificed in the legitimate extension of business, and the winning of new fields. These efforts remained not without their just reward, for to-day the bank numbers among its clients banks and bankers as well as merchants and manufacturers in all the states and territories of the Union, and takes rank with the leading financial institutions of the country.

CONTINENTAL NATIONAL BANK.

To meet the greater demands created by the growth of the business, the original capital of $2,000,000 was increased in April, 1901, to $3,000,000. The recently published report of the comptroller of the currency indicated a surplus of $1,000,000 and undivided profits of $56,739, total deposits $51,905,319, loans, discounts, stocks and bonds, $33,747,639, and cash and cash means $22,193,051.

The present staff of officers is as follows: John C. Black, president; G. M. Reynolds, vice-president; N. E. Barker, vice-president; Ira P. Bowen, assistant cashier; Benjamin S. Mayer, assistant cashier; W. G. Schroeder, assistant cashier; Herman Waldeck, assistant cashier; John McCarthy, assistant cashier.

The Chicago National Bank was organized January 9, 1882. At the end of the first three months of activity its deposits amounted to $827,536. To-day, after twenty-three years and some odd months of growth, the deposits amount to $22,958,845.

During all these years of rapid growth, Mr. John R. Walsh has been the president of the institution. His long, active service makes Mr. Walsh the dean of Chicago's banking fraternity as a chief executive. Mr. Fred M. Blount, the vice-president of the institution, is with one exception the oldest bank official in Chicago in any executive office.

The growth of the Chicago National Bank has been a steady and gradual one, coincident with the general financial growth of Chicago. Its increases have reflected the city's prosperity, and have been the result of steadily increasing patronage to the bank from old and new customers. No other banking or financial institutions have ever been merged into the original organization of the bank, so that its growth has never been accelerated by such sudden influxes of capital.

The first organization of the bank was effected with the following officers: John R. Walsh, president; James Adsit, vice-president; Henry H. Nash, cashier, and James Adsit, Jr., assistant cashier. In 1884 the Adsit interests withdrew from the bank and Henry H. Nash was chosen vice-president, William Cox became cashier, and Fred M. Blount, assistant cashier. Mr. Cox left the bank in 1891, and Mr. Blount succeeded to the position of cashier, T. M. Jackson becoming assistant cashier. After the death of Mr. Nash in 1892, Mr. Blount became vice-president of the institution. The officers have not changed since that time, and now are: John R. Walsh, president; Fred M. Blount, vice-president; T. M. Jackson, cashier; F. W. McLean, first assistant cashier, and J. E. Shea, second assistant cashier.

The directors are: C. K. G. Billings, Fred G. McNally, Maurice Rosenfeld, John R. Walsh, Fred M.

Blount, John M. Smyth and William Best. Associated with the Chicago National Bank are the Home Savings Bank, the Equitable Trust Company and the Chicago Safe Deposit Company. Six of the seven directors of the National bank are also directors in both the Savings bank and the Trust company.

The National bank as well as the Savings bank and Trust Company, pays interest on accounts of banks, individuals, firms and corporations. In the Savings bank, deposits are received for $1 or more, and the interest is compounded semi-annually. The Trust company performs the usual functions of an executor, keeping the trust funds and investments separate from the assets of the company. The Safe Deposit company

CHICAGO NATIONAL BANK.

vaults in the basement of the banking building are among the largest and strongest in the world.

The last report, May 29, 1905, of the condition of the Chicago National Bank showed assets amounting to $25,431,590.36, of which $12,555,559.68 was in loans and discounts, and $10,376,142.93 in cash assets. The capital stock was $1,000,000, with $1,000,000 surplus and $423,345.04 in undivided profits. The deposits on the same date aggregated $22,,959,845.32.

The completion of the home of the Chicago National Bank marked the beginning of a new order of architecture in Chicago. When the new building was projected it was aimed to produce a structure which would be typical of a bank to even the most casual observer. It is of the Corinthian style of architecture with four immense columns fifty feet in height, ornamenting its facade. The building has a ninety-foot frontage on Monroe street, and is a symbol of solidity and strength.

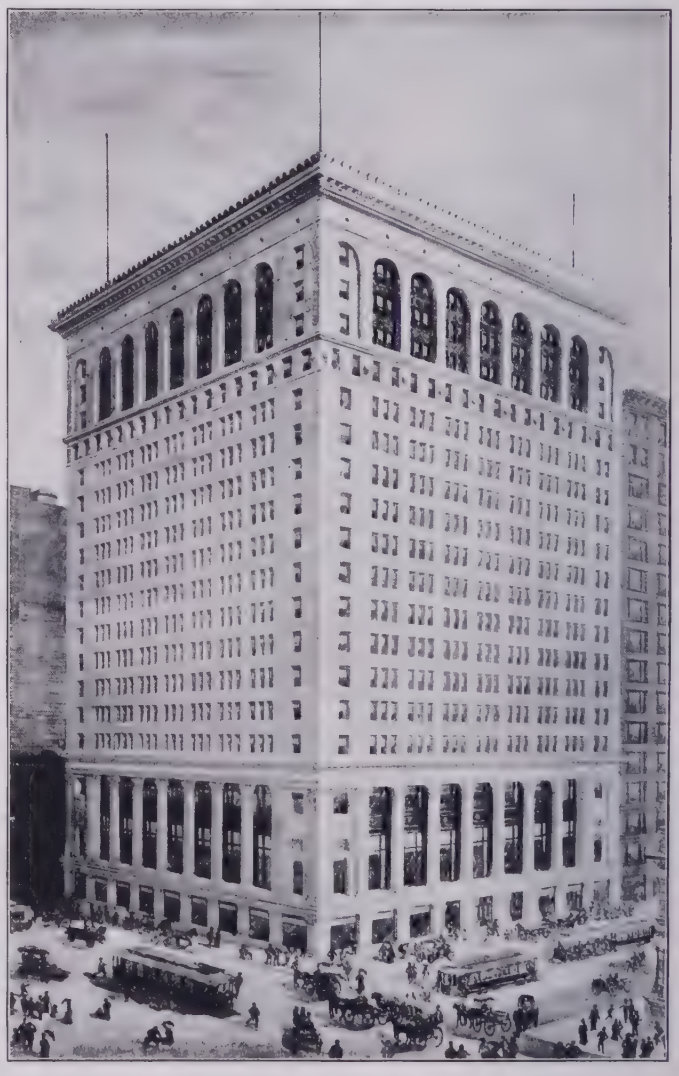
To a depth of fifty feet the building is four stories in height. The remaining 138 feet of the lot are covered by the banking floor, one-story high and roofed entirely with glass. The first floor of the front section of the building is occupied by the banking room of the Home Savings Bank and directors' room and president's office. On the second and third floors and fourth are the offices of the Equitable Trust Company, and the legal department of the various financial institutions.

The beautiful interior of the main banking room would make a harmonious setting for the richest of art galleries, as well as it does for this home of finance and commercialism. The floors are of Vermont marble and the counters and bases which enclose three sides of the room are of mottled green marble. The walls of the room are paneled with veined Pavanazzo marble from the quarries of Carrara, Italy.

These beautiful marble panels are matched just as they were cut from the quarries, and so perfectly do the tints fit together that each pair seem as if they were the symmetrical pages of a deep-toned marble book. In the space between the marble panels and the glass ceiling are sixteen semi-circular oil paintings representing scenes and incidents in the history of Chicago from the time of the Indians to the present day.

In the rear of the banking room are ten immense vaults in which the money, valuables and records of the banks are kept. They are three stories in height, and entirely clear of the outer walls so that they may be completely encircled by watchmen. The outer walls of the building are themselves three feet thick.

The Commercial National Bank. The organization of the Commercial National Bank was begun at a meeting held December 12, 1864. The bank was authorized by Hon. Hugh McCulloch, then comptroller of the currency, to begin business January 13, 1865. Those who were active in its beginning were P. R. Westfall, who was the first president of the bank; R. B. Ennis, Moses S. Bacon, Charles Ennis, W. H. Ennis and Nicholas O. Williams. These gentlemen composed its first board of directors. On May 16, 1866, the following additional directors were elected: Henry F. Eames, Wm. H. Ferry, H. Z. Culver, Henry H. Taylor, Henry W. King, Alonzo Campbell, Wm. H. Kretzinger, Bacon Wheeler, R. B. Mason and Alfred Cowles,



COMMERCIAL NATIONAL BANK.

all of whom were representative citizens of Chicago at that time, and they added greatly to the future success of the institution. The capital stock paid in was $200,000 and the report for September, 1866, shows the deposits at that time to have been $506,302.50. At the beginning of the next year Mr. Albert Keep and Mr. E. F. Pulsifer were added to the board of directors and the capital stock was increased to $500,000.

The growth of the bank was constant and uniform from the start, and among its customers were many of

the most substantial men of the city; all of which was the direct result of the standing and ability of the men who stood as the representatives of the institution and directed its wise and conservative policy.

From time to time important additions were made to the directory. S. W. Rawson became a director in 1868; D. K. Pearsons in 1873; N. K. Fairbank in 1876; Franklin McVeagh and George L. Otis in 1880; Henry Field, O. W. Potter and Jesse Spalding in 1885; Norman Williams in 1888; Wm. J. Chalmers in 1891; and James H. Eckels, John C. McKeon and Robert T. Lincoln in January, 1898. Mr. Wm. H. Ferry was vice-president from May, 1866, to March, 1880, and George L. Otis from January, 1881, to 1885; Mr. Henry Field from 1885 to 1890; Mr. O. W. Potter from 1890 to 1896.

The office of president was filled continuously by Mr. Henry F. Eames from 1867 to 1897, and under his guidance the bank prospered and became one of the leading financial institutions in Chicago. Deposits increased during his term from $506,300 to more than $9,000,000, and to his wise and careful management, supported by the directory, is due in a large measure the success which the bank has enjoyed.

On March 20, 1886, the capital was increased to $1,000,000, which was done entirely from accumulated earnings.

On January 1, 1898, Mr. James H. Eckels, former comptroller of the currency, was elected president. The reputation as a financier which he brought to the institution caused a marked increase in its business, which is best shown perhaps by the increase in its deposits from about $9,000,000, at the time he took charge, to over $19,000,000 at the close of his second year, as chief executive. The statement March 14, 1905, shows a surplus fund of $1,000,000, in addition to the capital stock of $2,000,000, and undivided profits of $783,399.53.

The present officers of the Commercial National Bank are: James H. Eckels, president; Joseph T. Talbert, vice-president; Ralph VanVechten, second vice-president; David Vernon, third vice-president; N. R. Losch, cashier; Geo. B. Smith, assistant cashier; Harvey C. Vernon, assistant cashier; H. Erskine Smith, assistant cashier and auditor; Wm. T. Bruckner, assistant cashier. The directors are Franklin McVeagh, Chas. F. Spalding, Wm. J. Chalmers, James H. Eckels, Robert T. Lincoln, E. H. Garry, Paul Morton, Darius Miller and Jos. T. Talbert.

The Illinois Trust and Savings Bank was organized May 7, 1873, commencing business on the northwest corner of Madison and Market streets. The capital stock at that time was $100,000, and the first president of the bank was Mr. L. B. Sidway. In 1875 a change of location was made to Clark street, between Washington and Madison, and the bank's growth continuing with increased force, a second change became imperative in 1878, when the quarters so long occupied by the old Fidelity Bank were taken after the failure of the last-named institution. During that year President Sidway retired from the control of the affairs of the bank, and H. G. Powers assumed the direction of the financial management. He continued in charge until 1880, when the present president, John J. Mitchell, was chosen to succeed him. Under the wise and energetic administration of President Mitchell the deposits soon reached the sum of $1,000,000, an excellent showing for that time, and especially by so comparatively a young concern.

JOHN J. MITCHELL.

Here the Illinois Trust and Savings Bank did a constantly increasing business for ten years, eight of which were under the active and personal management of President Mitchell. No better illustration of Mr. Mitchell's success could be cited than the fact that when the increased demands for greater facilities, in 1888, demanded and made imperative a third removal, the capital stock had been increased to $2,000,000, a sum twenty times greater than the original capital, and a surplus of $2,500,000 had been accumulated, and at a later date again increased to $3,000,000. The ground floor of the Rookery was chosen as the new location, and so commodious and extensive were these quarters that the most sanguine friend of the bank would have declared no further change ever would become necessary. But such has been the success of the bank, both in its banking, trust and savings departments, under its present

efficient management, that even the commodious quarters in the Rookery proved too small. An opportunity was afforded for the building of a permanent home on La Salle street, between Jackson and Quincy streets, and this building, which was completed in the early part of 1897, at a cost of about $600,000, is probably one of the most complete banking structures in the world.

The statement of the bank issued March 15, 1905, shows a capital stock of $4,000,000; surplus $5,000,000; undivided profits of $1,188,033.16 and deposits of $89,608,121.70.

ILLINOIS TRUST AND SAVINGS BANK.

The officers of the bank are as follows: John J. Mitchell, president; William H. Mitchell, vice-president; W. H. Reid, vice-president; F. T. Haskell, vice-president; Chauncey Keep, vice-president; B. M. Chattell, cashier; J. T. Cooper, F. I. Cooper and E. S. Layman, assistant cashiers; William H. Henkle, secretary; F. M. Sills, assistant secretary.

John J. Mitchell. It is often said that genius is not hereditary. If the rule be sound as a generality, Mr. Mitchell's career must be taken as an exception to it. At the time of his election to the office that he now holds, that of president of the Illinois Trust and Savings Bank, he was the youngest presiding officer of any metropolitan bank in the United States. Under his management the institution has attained financial eminence that falls little, if at all, short of the degree of preëminence. He was born at Alton, in this state, November 3, 1853, and is the son of William H. Mitchell, who for many years was president of the First National Bank of that city, and who was one of the earliest and largest stockholders of the Illinois Trust and Savings Bank, with the management of which he is still connected.

Though the circumstances of his parents were such as to render his early entrance on a business career unnecessary, the inherited financial tendency of Mr. Mitchell was so strong as to impel him to follow in his father's steps; accordingly, after a common school education and a brief period of study in the Waterville, Maine, Institute, he entered as messenger boy in the bank of which he is now president. The step was characteristic—he doutless might have gone into the bank, at least, as clerk, but he preferred to make himself familiar with every detail of the business. His promotions were gradual, the functions of teller, cashier and president having been performed by him. In addition to the pressing duties of his office in the Illinois Trust and Savings Bank, Mr. Mitchell acts as director of the

Chicago Stock Exchange and of the Traders' Insurance Company.

The Merchants' Loan and Trust Company. No institution can be more justly called a representative one, or is more closely identified with the city's financial prosperity, than the Merchants' Loan and Trust Company, the oldest banking institution in the state of Illinois. Organized in 1857, at a time when the monetary circulation of the Northwest consisted mainly of "wildcat" currency of various degrees of worthlessness, and surviving in subsequent years disasters which proved financial maelstroms to hundreds of less fortunate organizations, it has, during its forty-eight years of busy existence, successfully coped with almost every variety of calamity known in the annals of banking. The bank's doors were thrown open for business in May, 1857, on the first floor of the old Board of Trade Building at the corner of Water and La Salle streets. The state charter fixed the capital stock at $500,000, an amount that has since been increased at various times to $3,000,000. Mr. John H. Dunham was its first president, and Mr. A. J. Hammond its first cashier. The thirteen original trustees were Isaac N. Arnold, W. E. Doggett, D. R. Holt, William B. Ogden, John H. Foster, Walter L. Newberry, Henry Farnum, Jonathan Burr, George Steele, J. H. Dunham, F. B. Cooley, A. H. Burley, and John High—names that must awaken a host of recollections to the Chicago resident of antebellum days.

A coherent account of the old "wildcat" or "stumptail" currency troubles, in their relation to the history of this bank from 1857 to 1862, would fill a volume. It can, however, be said that the Merchants' was from the start a pronounced and unyielding advocate of the expulsion of the irresponsible system of banking which ultimately flooded the country with so much irredeemable currency, and inasmuch as the trustees possessed the courage to shape the practical policy and methods of the bank in accordance with their convictions they made enemies. Their path was anything but a bed of roses, and it is said that more than once bitter and determined efforts were made to "down" the new institution, which, however, stood its ground bravely and came through these trying periods with flying colors.

Mr. D. R. Holt, who had taken Mr. Hammond's place as cashier, resigned in 1862, and was succeeded by Mr. Lyman J. Gage, later secretary of the treasury, and

MERCHANTS' LOAN AND TRUST COMPANY.

about this time Solomon A. Smith was elected president, discharging the duties of that office until his death in 1879. Charles Henrotin, who followed Mr. Gage, was cashier through two calamitous periods—the great fire of 1871 and the panic two years later. At the time of the fire all the books were burned, but upon resuming business a few days later the bank placed to the credit of each depositor as he appeared the amount he claimed to have had in its keeping and over 1,000 accounts were then reopened without a single note of dissatisfaction. So prosaic and commonplace is the routine of banking ordinarily that an incident of this kind seems almost dramatic.

The Merchants' seems to have been a sort of training school for bankers, for not only Mr. Gage and Mr. Henrotin received their education behind its counters, but Mr. M. D. Buchanan, later cashier of the Commercial Bank, Mr. W. M. Scudder, at the time of his death cashier of the Hide and Leather Bank, and others who have won high places in the financial world, were also identified with this institution at one time or another.

The statement of the Merchants' Loan and Trust Company, dated March 15, 1905, shows, besides the capital stock of $3,000,000, a surplus of $3,000,000, undivided profits of $583,904.06, and deposits of $51,547,487.68. The officers are Orson Smith, president; E. D. Hulbert, vice-president; J. G. Orchard, cashier; F. N. Wilder, assistant cashier; F. G. Nelson, assistant cashier and manager of foreign exchange department. The directors are: Marshall Field, Albert Keep, Lambert Tree, Orson Smith, Enos M. Barton, Cyrus H. McCormick, Erskine M. Phelps, Moses J. Wentworth, E. D. Hulbert, E. H. Gary, T. J. Lefens, Chauncey Keep, Clarence A. Burley. The Merchants' Loan and Trust Building, at the northwest corner of Clark and Adams streets, is the home of this company. The building was finished in May, 1900, and the Merchants' occupies the entire bank floor with the exception of a portion at the west end of the building, which is occupied by the clearing house.

The American Trust and Savings Bank was organized in 1889 by Gilbert B. Shaw, who was its president for many years. It first opened its doors on August 1 of that year in the Owings building, at the corner of Dearborn and Adams streets. Two years later it moved to La Salle and Madison streets, remaining there until its removal in 1899 to its present location in the New York Life building. Conservative management and careful investments have enabled it to extend its scope gradually, until now it is one of the foremost financial institutions in the city.

Besides transacting a general banking business this institution devotes much attention, as its name signifies to its trust and savings departments. Its expansion continued until its consolidation with the Federal Trust Company on May 29, 1905. Its capital was then increased from $2,000,000 to $3,000,000. Its surplus and undivided profits are $2,004,229.98, and its deposits are $30,127,616.98.

On May 1, 1906, the institution will occupy its own building at the northeast corner of Monroe and Clark

AMERICAN TRUST AND SAVINGS BANK.

streets, which will be one of the largest in the city. The building will be eighteen stories high, with 90 feet on Monroe street and 125 feet on Clark street. The officers of the bank are as follows: E. A. Potter, president; T. P. Phillips, vice-president; James R. Chapman, vice-president; John Jay Abbott, vice-president; Charles S. Castle, cashier; F. J. Scheidenhelm, assistant cashier; Oliver C. Decker, assistant cashier; Edwin L. Wagner, assistant cashier; Frank H. Jones, secretary; William P.

Kopf, assistant secretary; Irving J. Shuart, assistant secretary; George B. Caldwell, manager bond department; Wilson W. Lampert, auditor. Its directors are Joy Morton, E. H. Gary, E. P. Ripley, Theodore P. Shonts, Norman B. Ream, John F. Harris, T. P. Phillips, W. H. McDoel, Charles H. Thorne, E. J. Buffington, William Kent, V. A. Watkins, G. B. Shaw, Benjamin Thomas, Charles H. Deere, James R. Chapman, Edwin A. Potter.

The Northern Trust Company was organized August 7, 1889, and has taken its place as one of the soundest and most conservative banking institutions in the West. It has a capital of $1,500,000 with a surplus fund of $1,000,000, its capital having been increased July 1, 1905, from one million to one million and a half. The Northern Trust Company has been located on the banking floor of the Rookery building, but owing to the steady increase of its business it is now (1905) erecting a building of its own at the northwest corner of La Salle and Monroe streets, upon the site of the old Bryan block.

This building will be for the exclusive use of the Northern Trust Company, with its main frontage of 190 feet on La Salle street and a depth of 73 feet on Monroe. It will comprise four stories with basement and sub-basement, and will cost approximately $750,000. Of pure classic architecture it will be one of the most imposing structures in Chicago. The first story will be of massive layers of stone, forming a solid base for the Grecian facade of Ionic style of architecture. Sixteen massive Ionic columns will support the cornice.

The interior plan contemplates the following divisions: The first floor will be reserved for the savings department, with a grand lobby and grand marble stairway leading to the second floor, which will be devoted to the banking department; the third floor will be given over to the trust department, and the fourth floor will be occupied partly by the Chicago Clearing House, and

THE NORTHERN TRUST COMPANY BANK.

supply, storage and filing rooms. The convenience of patrons is especially provided for and when finished the new building will be one of the handsomest and most complete structures of its kind in the city. At the close of business, August 26, 1905, the condition of the bank was as follows:

Resources.—Time loans on security, $5,859,891.04; demand loans on security, $7,012,509.23; bonds, $7,698,328.99; stocks, $114,815; real estate (northwest corner La Salle and Monroe streets for bank building), $850,000; due from banks, $6,876,109.84; checks for clearings, $760,617.76; cash on hand, $3,910,665.46. Total, $33,082,937.32.

Liabilities.—Capital stock, $1,500,000; surplus fund,

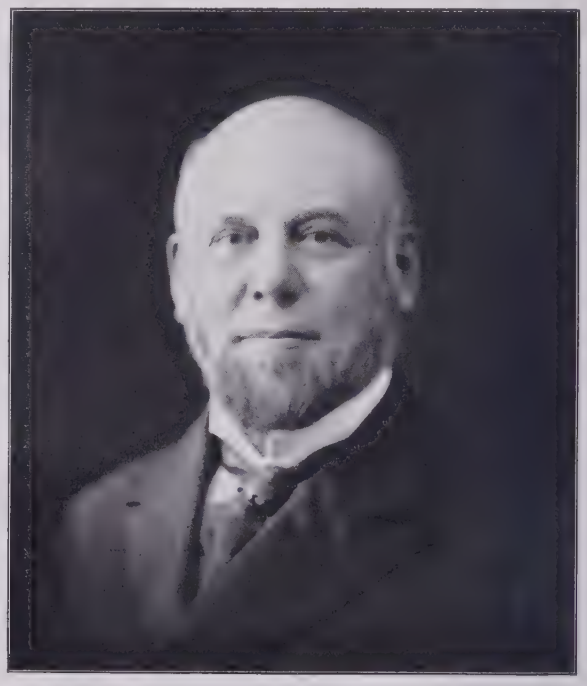
$1,000,000; undivided profits, $702,468.78; dividends unpaid, $330; interest reserved, $97,568.95; cashiers' checks, $246,707.54; certified checks, $13,509.51; demand deposits, $16,119,466.27; time deposits, $13,402,886.27. Total, $33,082,937.32.

The officers are: Byron L. Smith, president; F. L. Hankey, vice-president; Solomon A. Smith, second vice-president; Thomas C. King, cashier; Robert McLeod, and G. F. Miller, assistant cashiers; Arthur Heurtley, secretary; Howard O. Edmonds and Harold H. Rockwell, assistant secretaries; Edward C. Jarvis, auditor. The directors are: A. C. Bartlett, J. Harley Bradley, William A. Fuller, Marvin Hughitt, C. L. Hutchinson, Martin A. Ryerson, Albert A. Sprague, Solomon A. Smith, Byron L. Smith.

N. W. Harris & Company, bankers, of Chicago, New York and Boston, have for their watchword, "conservatism." This successful firm deals only in high-grade investment securities, and transacts a general banking business. It was organized in 1882 by the present senior partner, Mr. Norman W. Harris. The firm has steadily increased its business, always along ultra-conservative lines, to such an extent that its sales of bonds now exceed $75,000,000 annually.

The success of N. W. Harris & Company, and the high esteem in which its judgment on securities is held by investors, is justified by its record, of which it is jealously proud. While the firm does not guarantee the payment of securities handled by it, it stands ready to devote its best efforts and the ability of its perfect organization to the protection of its clients' interests. The firm believes that the responsibility of a reliable banking house should not end with the marketing of an issue of bonds. In the event of new and unexpected developments of an unfavorable character in a property, the house should be in a sufficiently strong position to assume the entire management, and to protect the interest of its clients. The knowledge that the strength and influence of the house will be exercised in this way is almost as important to the investor as the ability and care necessary in making original investments.

The average investor has neither time nor the facilities to make a complete and proper examination of proposed investments, and in consequence must rely largely on the judgment of his banker. Realizing this fact, the conscientious and successful banker should have in his employ tried and experienced experts, and a business experience extending over a period of many years covering times of depression as well as of financial prosperity. N. W. Harris & Company combine these important elements of success. Their experience extends over twenty-two years, during which time occurred the financial panics in 1893 and 1896. Mr. Harris was for thirteen years the principal executive officer of one of the leading life insurance companies of this country and was largely responsible for its investments. There are now seven other active partners in the firm, all men of wide experience in the business and who have been associated with the house for from ten to twenty years. The firm's banking houses in Chicago, New York and Boston are each under the direct supervision of one or more active members of the firm, who are assisted by an experienced and competent corps of managers and experts in each department of the business. The total number of people now giving



N. W. HARRIS.

their entire time to the firm's business is one hundred and eighty.

In addition to the investment business, N. W. Harris & Company, in their banking department, transact a private banking business, pay interest on deposits which, according to a late statement, amount to $4,926,373.02. The firm makes loans on collateral, buys and sells foreign exchange and issues travelers' letters of credit available in all parts of the world. Every facility is afforded its customers for the prompt transaction of business in this department.

N. W. Harris & Company's Chicago office is on the banking floor of the Marquette building, 204 Dearborn street.

Greenebaum Sons is one of the strongest private banking institutions in Chicago. The house was founded in 1877, and has continued in business uninterruptedly up to the present time (1905). The banking

rooms are at 83 and 85 Dearborn street. The members of Greenebaum Sons are Henry Everett Greenebaum, Moses E. Greenebaum and James Eugene Greenebaum. The father, Elias Greenebaum, is one of the pioneer bankers of Chicago and had been in the business for twenty-two years when his sons formed their banking house. He still takes an interest in affairs and maintains an office at their place of business. The firm does a general banking and foreign exchange business, making a specialty of negotiating loans on Chicago real estate and of supplying investors with investment securities, mortgages, bonds, etc. This firm is well known in all parts of the world on account of their extensive foreign connections.

Elias Greenebaum was born at Eppelsheim, Grossherzogthum Hessen, Germany, June 24, 1822, the son of Jacob and Sarah Greenebaum. He was educated in the public schools and in the agricultural, commercial and trade schools of Kaiserslautern, Germany, and came to the United States in September, 1847. For a few months he stopped on his way west at Uniontown, Ohio, but came to Chicago, April 14, 1849, and at present is one of the oldest residents of Chicago, having lived here over half a century. He entered the mercantile business for himself shortly after coming to Chicago and prospered from the start. Seven years afterwards he became a banker. In 1860 Mr. Greenebaum founded the banking house of Greenebaum & Foreman, of which he was the senior member for a number of years. When the firm of Greenebaum & Foreman was dissolved he retired from active business. Mr. Greenebaum was school agent of Chicago in 1856 and is independent in politics. He was one of the founders of Sinai congregation. He has a handsome residence at 4510 Grand boulevard. He was married March 3, 1852, to Miss Rosina Straus. Their children are Henry Everett, Moses Ernest, Emma E. (Mrs. Gutman), and James E. Greenebaum.

Henry Everett Greenebaum, the oldest son of Elias Greenebaum, has had a wide experience in the banking business. He was born in Chicago, September 1, 1854, and graduated from the Jones School in 1867, and from the Central High School four years later. He also attended business college the next year, graduating from Bryant & Stratton's in 1872. He entered the employ of the First National Bank in the spring of the same year, and the next year went with his father's firm, Greenebaum & Foreman, bankers. In order to get a wider experience of the business he accepted positions with New York banks in 1873, remaining there for four years. On his return to Chicago in 1877, he organized the banking firm of Greenebaum Sons. Since then he has occupied a prominent position in the banking, real estate and loan circles, at present being chairman of the executive board of the Chicago Real Estate Loan Association, composed of the principal banks and firms in the business. He is independent in politics and a member of the Reformed Jewish Church. He also belongs to the Standard, Ravisloe Golf and French clubs. He was married April 15, 1879, to Miss Helen F. Leopold. Their children are Carrie (the wife of Frank E. Mandel, of the firm of Mandel Brothers), Walter Jerome and John G. The family residence is at 3337 Michigan avenue.

Moses Ernest Greenebaum was born in Chicago March 17, 1858. He was educated at the public and high schools of Chicago. He entered his father's bank after graduating and was admitted to the firm in 1877.

ELIAS GREENEBAUM.

He became a member of Greenebaum Sons the same year. To his energy and aggressive business methods is due much of the success of the house. He is a member of the Chicago Real Estate Board, the United Hebrew Charities and the Standard and Ravisloe clubs. He is a Republican. He was married to Miss Julia Friedman of Chicago, December 23, 1884. They have three children, Eleanor E., Ernest M. and Edgar M. Their home is at 4504 Drexel boulevard.

James Eugene Greenebaum, the third member of Greenebaum Sons, was born April 3, 1866. He was educated in the public schools of Chicago and at Yale University, being graduated from this institution with the degree of Ph. B. in 1886. He entered the banking house of Greenebaum Sons just after his graduation and was admitted as a partner a few years later. He is a Republican in politics. He is a member of the Standard and Yale clubs. He was married to Miss

Amy B. Kramer, September 7, 1893. They have three children, Frederic J., Charles J. and Edith J. The family residence is at 4508 Grand boulevard.

John Burnett Russell, head of the well-known banking firm of J. B. Russell & Company, was born at Hartwick, Otsego County, New York, January 8, 1869. His

JOHN BURNETT RUSSELL.

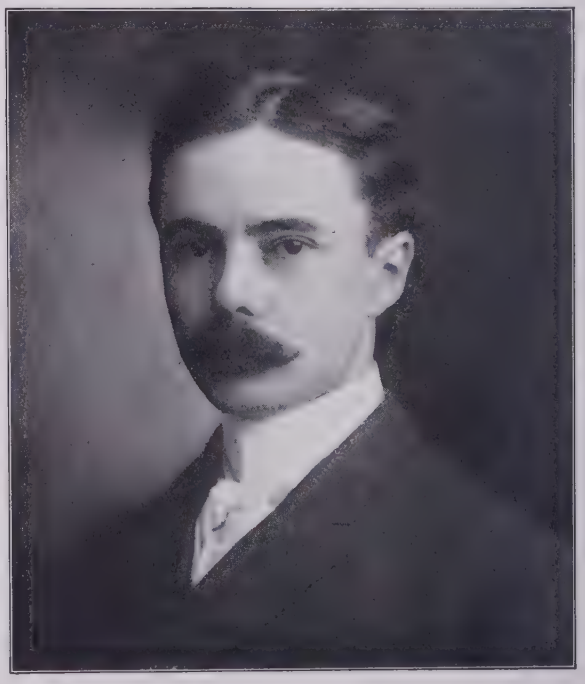
parents were John Emory and Belle (Burnett) Russell. He was educated in the grammar schools of his own city and later at Wyoming Seminary, Kingston, Pennsylvania.

Mr. Russell has been in the banking business since 1886. In that year he went to work for the Wyoming National Bank of Wilksbarre, Pennsylvania. He remained with this institution until 1895 when he established the banking house of J. B. Russell & Company in Wilksbarre and Scranton, Pennsylvania. The business of the firm grew rapidly and houses were established in New York, Chicago, Reading and Carbondale, Pennsylvania, Binghamton, New York and Dayton, Ohio. The concern has financed a number of extensive public utility corporations, the most prominent among them being the Illinois Tunnel Company of Chicago and the Automatic Electric Company, also of this city. The entire capital for financing these two large enterprises was raised through J. B. Russell & Company. For a long time, while the tunnels were building in Chicago, there was much speculation as to where the millions were coming from. In due time, when the enterprise had been carried to a successful conclusion, the real backers were made known.

J. B. Russell & Company at the present time are the financial representatives of a number of large corporations and transact a general banking and stock exchange business. The associate partners of Mr. Russell are Albert G. Wheeler, Jr., and John M. Shaw of New York, both of whom are members of the New York Stock Exchange, and Grant Pelton of Scranton, Pennsylvania. The main offices of J. B. Russell & Company are at 46 Wall street, New York. The Chicago offices are in the Rookery.

Mr. Russell was married to Miss Fannie J. Schooley of West Pittston, Pennsylvania, in 1892. They have three children, Louise, Joseph and John B., Jr. Mr. Russell is well known in club life in Chicago, New York and Pennsylvania. He is a member of the Union League, Lawyers' and City Mid-day clubs of New York; of the Calumet, Midlothian and Exmoor clubs of Chicago, and of the Westmoreland and Wyoming Valley Country Club of Wilksbarre, the Scranton Club of Scranton, Pennsylvania, and numerous other organizations.

A. P. Ballou, capitalist, is a representative type of the young, enterprising and progressive business men who have made Chicago famous. Barely thirty years



A. P. BALLOU.

old, his position in the world of finance and business is one that is rarely attained by men until they have passed the middle span of life, even in hustling, bustling Chicago. Amos Percy Ballou was born in Bradford, Miami County, Ohio, October 24, 1874. His father, Horace Martin Ballou, conducted and edited the Brad-

ford Free Press for many years. When he was nine years old his father died and the family moved to Covington, Ohio, where the boy attended the common schools. At the age of fifteen he entered upon a course of study in the West Side Commercial School of this city.

He began his business career with the Henry Sears Cutlery Company, but finding that uncongenial, he entered the real estate business with B. F. Jacobs. He was given charge of Evergreen Park subdivision, which he conducted so ably that it soon developed into a thriving and beautiful suburb. With characteristic energy Mr. Ballou took a lively interest in the affairs of the village he had helped to create. He established and edited the local paper, and was chosen village treasurer on the Republican ticket. His real estate transactions naturally brought him into close relations with the insurance business, and he was offered the position of general agent of the Royal Union Mutual Life Insurance Company of Des Moines, Iowa. This agency he successfully handled for two years, when he was induced to make investments in some Butte, Montana, mining properties. This led him to an investigation and study of mines and mining generally, and discovering in it a pursuit for which he was eminently fitted, he soon abandoned all other business and gave his entire attention to this line of endeavor. He is secretary and treasurer of the International Copper & Gold Mining Company, of Arizona and Mexico; secretary and treasurer of the Montana Copper & Gold Mining Company of Wyoming; secretary and treasurer of the Santa Fe Copper & Gold Company of Arizona and Mexico; president of the Santa Cruz Mining Company and treasurer of the Southern Sonora Development Company of Mexico, besides having a close connection and exercising a powerful influence in several other companies.

To quote Mr. Ballou: "Old Mexico is the greatest field of mineral wealth known to man."

In 1894 Mr. Ballou married Clara May Ruhl, of Covington, Ohio. He is connected with several literary organizations, in which he takes considerable interest. He is a member of the Colonial Club, a Mason, Knight Templar and Mystic Shriner. He is a member of the Forty-first Street Presbyterian Church. Mr. and Mrs. Ballou have one child, a daughter, six years old.

Robert C. Sturgeon, secretary-treasurer of the Eagle Mining & Improvement Company, was born near Pittsburg in 1862. He received an academic education and at the early age of sixteen became a teacher in the public schools. Mr. Sturgeon entered commercial life at the age of eighteen with a prominent Pittsburg firm, and in 1885 came to Chicago determined to be "somebody." He had eminent success. He was associated with Nelson Morris & Company for several years, during which he took a law course in the night school of the Lake Forest University. He was admitted to the bar in 1896, and during his subsequent six years of law practice conducted successfully many important cases in the Chicago and Cook County courts.

Early in the year of 1902 Mr. Sturgeon became interested in the Eagle Mining and Improvement Company, and at present he holds the responsible position of business manager and shares in the controlling interest of the concern, which will soon rank among the best paying mines in the world. The Eagle mines are by mining experts considered on par with the Homestake mine and other bonanzas. The company was in need of an

ROBERT C. STURGEON.

energetic man to finance and manage it when Mr. Sturgeon entered the corporation. Through his efforts the Eagle Mining and Improvement Company has become an assured success. Having satisfied himself of the unlimited possibilities of the mines, and ambitious to make it one of the foremost mines in the United States, Mr. Sturgeon has maintained the almost unequaled growth of the concern. At present a plant with a capacity of 150 tons per day is in full operation on the mine, which is located at Parsons, New Mexico. Up to the moment Mr. Sturgeon became interested in the mine, the thought of his becoming a mining man never occurred to him. Before he decided upon his life's work he visited the mining region with expert engineers and, because of the almost incredible reports of the high quality of the property, he decided to devote his entire time

to the new enterprise. The present shareholders comprise a small circle of prominent business men who implicitly confide in the leadership and management of Mr. Sturgeon, and his partner, Mr. Rice.

The Parsons mine compares favorably with the largest in the world, with its three fifty-ton unit mills, which means an output rendering a net profit of $300 per day.

Mr. Sturgeon is a member of the Illinois Athletic Club and is a very popular man in commercial and professional circles. He declares he is the "kind of a Democrat any citizen ought to be, as he voted twice for McKinley and twice for Roosevelt."

Howard H. Hoyt, western superintendent of the Equitable Life Assurance Society, in a few years has taken first rank in the insurance field. In May, 1902,

HOWARD H. HOYT.

when he took charge of the Chicago office, the entire Illinois business did not exceed $4,000,000 a year. Before the close of 1904 Chicago had passed the $2,000,000 a month class and headed the list for the month of all the society's agencies in the United States.

It is difficult to overestimate the importance of this achievement, one of the greatest in the history of life insurance. But great things were expected of Mr. Hoyt. There were far older men in insurance work. There were men of greater experience, but Mr. Hoyt had the reputation of doing things. In two years, before coming to Chicago, he had increased the volume of business in Wisconsin from $380,000 to $3,000,000 a year, which in itself was a notable achievement.

When the officers of the society looked around for a man who could raise Illinois from the dead, it was inevitable that they should select the leader who had worked such a miracle in Wisconsin. At this time, May, 1902, the entire volume of Illinois business did not exceed $4,000,000 a year, although the Chicago field is naturally one of the richest in the United States. In the monthly statement showing the relative rank of the fifty leading Equitable agencies in the country, up to this time Chicago rarely, if ever, appeared.

The wisdom of Mr. Hoyt's selection was at once apparent. The first month after his appointment to so responsible a position Chicago took its place on the fifty list, never again to be ousted. Then the agency began to move steadily and swiftly toward the top. In less than one year the volume of business doubled. Two strenuous years passed, and this agency, whose annual business had been only $4,000,000, took its place in the $2,000,000 a month class. Before the close of the year 1904, Chicago headed the list for the month and when the report of the year's business was finally made, Chicago actually led all the agencies of the United States. Mr. Hoyt had "made good," to use an expressive colloquialism, and Chicago had come into its own.

Even a superficial student of these changes must attribute the enormous growth of Chicago business largely to the personality of Mr. Hoyt. That he is an able organizer and a good judge of men is evident, talents greatly needed in perfecting the Illinois organization. But the real secret of his strength seems to be the spirit of loyalty which he has been able to infuse into the men, from the general manager to the humblest salesman in the field.

In his Wisconsin work he showed still another side of his genius. Much of the increase in the volume of business there was due to his personal efforts. Although a comparatively new man in the work, he made a record for writing insurance second to none in the United States. There, too, he established the same personal relations with his men. When he came to leave the field to take the superintendency in Chicago there was a notable gathering in Milwaukee at which the retiring manager was presented with a beautiful loving cup, as evidence of the esteem of his associates. On Christmas eve, 1904, an elegant gold Swiss watch, appropriately engraved, was given to him by the men who have been accomplishing such wonders under his leadership.

The remarkable rise of Mr. Hoyt in the insurance firmament demonstrates what can be done by an earnest consecration of talent to this great work. He was born in Madison, Wisconsin, May 29, 1857. His elementary education in the public schools was followed by a course in the University of Wisconsin and a subsequent course in the law school of the same institution.

After his graduation, in 1879, he practiced law five years in Wausau, Wisconsin. He then removed to Milwaukee and established an original credit system. In 1898, becoming convinced of the unusual opportunities in life assurance work, he accepted an appointment as general agent for the Northwestern Mutual Life Insurance Company. Such was his record that in two years the Equitable Life made him general manager for the state of Wisconsin and northern Michigan.

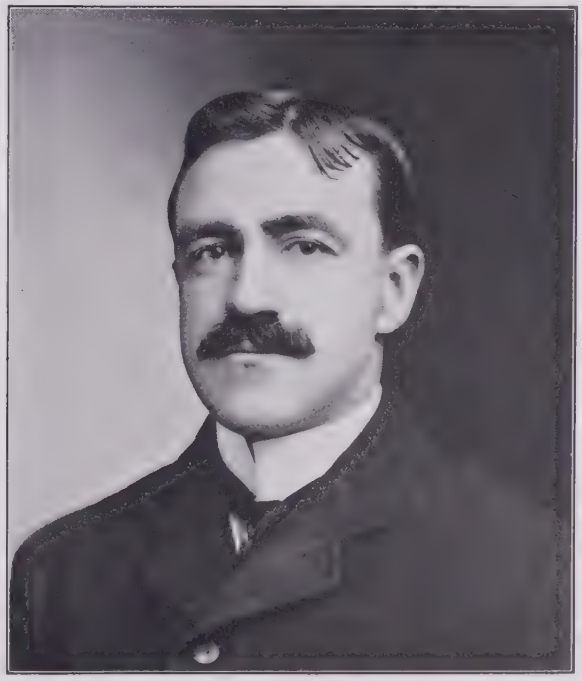
Now, as the western superintendent of the strongest financial institution on earth, he is in the fullness of his powers and at the outset of his career. The society secured new quarters in the magnificent First National Bank building and in May, 1905, took possession of the finest offices in the West.

Mr. Hoyt is also widely known in insurances circles because of his contributions to insurance literature. His published lecture, The Making of An Insurance Salesman, delivered at the Association Auditorium in Chicago, and his series of pamphlets on insurance topics have been in great demand by managers and field men in all parts of the United States.

The Federal Life Insurance Company. For many years the financial and commercial giants of this great city have desired the establishment of a legal reserve life insurance company. They realized it would be an influential factor in the growth and development and prosperity of the large and rapidly developing area of country tributary to Chicago. They realized that the influence which the great life insurance companies of New York City had exercised upon the financial supremacy of that city would be duplicated by the establishment in Chicago of a legal reserve company which would command the confidence and support of the general public. Many meetings were held by our public spirited financiers with the view of establishing such a company. These meetings developed the fact that great ability, zeal, continuous effort and fidelity to such a company if established were necessary in order to place the company in the commanding position which they desired, and in order that the company should have the unquestioned confidence, the unqualified support and the liberal patronage of the general public.

In 1900, after very careful consideration, the Federal Life Insurance Company was organized as a legal reserve company, untainted with any of the erroneous ideas of assessmentism, and so carefully were its officers and representatives selected, and so ably and faithfully have they exercised the trusts reposed in them, that the company from its incipiency has commanded the confidence and patronage of the insurance buying public to such an extent that its success has been almost phenomenal. December 31, 1904, at the end of its fifth year (being a little more than four and a half years of actual operation), the company has accomplished more than many of its larger and older competitors in from ten to thirty years of their existence. At the date in question it had over $8,000,000 of insurance in force, over $700,000 of assets and a rapidly increasing surplus. It is rapidly increasing its able representatives, and during each month of the present year is writing approximately 200 per cent more of insurance than it wrote during the corresponding month of last year.

The Federal never for a minute has deviated a single iota from correct underwriting principles. It has "hewn strictly to the line" that has been approved by time-tried actuarial science, and as a result is stable from the bottom of its foundation up. The company has made a specialty of paying all just claims promptly and immediately upon receipt of completed proofs of death. The investments of the company have been made with great care, and its assets are worth at least one hundred cents on the dollar.



I. M. HAMILTON.

Senator Isaac Miller Hamilton, who was born in Iroquois County, Illinois, and resided within four miles of his birthplace until 1889, when he removed to this city, is one of the best known and liked lawyers and bankers in this state. Energetic, forceful and considerate, he surrounds himself with able men and always makes conspicuous successes of his efforts. Upon the organization of the Federal he accepted the presidency of the company, and has devoted his entire time and talents to its service ever since. Associated with Presi-

dent Hamilton in the management of the company are the following strong and able men: C. A. Atkinson, vice-president and counsel; George M. Bard, second vice-president; S. H. Levy, fourth vice-president and assistant superintendent of agencies; R. M. Wilbur, secretary; W. E. Brimstin, assistant secretary; J. L. Hamilton, treasurer; E. M. Potter, assistant treasurer; Miles M. Dawson, consulting actuary; J. P. Mahoney, assistant counsel; F. L. B. Jenney, medical director; Jasper E. Brady, superintendent of agencies. The management of the company has been economical, progressive and courageous, and the results secured are highly gratifying to the policyholders, stockholders and officials.

The success of the company illustrates what the Chicago "I will" spirit, combined with able, earnest, continuous effort, will accomplish. The company always has believed in the thought that the laborer is worthy of his hire, and has had no "soft snaps" anywhere for anyone. The company's policy has been to pay low salaries, give small commissions, invite publicity and give to the policy holder the greatest returns possible for his investment. The company's headquarters always have been in the Marquette building, Dearborn and Adams streets, and there the work of the agencies in the various parts of the country is directed. The growth of the business has compelled the company to occupy additional space from time to time as the necessary employees have increased. There is no busier center in this busy city than the home office of the Federal Life Insurance Company.

The company has a paid-up capital of $150,000, of which amount $100,000 is and always has been on deposit with the State Insurance Department, as an initial protection to its policy holders. The officers of the Federal, who have labored so hard for the success of the company, feel entirely justified in asserting, with a great deal of pleasure, that there is no better company on earth, none which issues better policy contracts, none which pays its death claims more promptly, none in which the policy holder may carry with more safety his protection for his loved ones or his investment for himself.

The National Life Insurance Company of the United States of America. The growth of the National Life Insurance Company, whose home office is in Chicago, in the National Life building, has been surprisingly rapid. The most marked progress has been made under the present management, which dates from February, 1904. The National Life was established in 1868; up to 1900 its growth was gradual. In 1900 its assets were but $2,335,000, and its insurance in force a trifle over $14,000,000. Two years later these items had increased to $3,000,000 and $24,400,000 respectively. At the close of 1903 the assets were $4,700,000 and the insurance in force $40,000,000. After the election of P. M. Starnes as president, measures were taken to push the company, and the following year, while the insurance in force had only increased to $42,000,000, the assets were $5,250,000, in round figures. The premium income increased from $338,000

NATIONAL LIFE BUILDING.

in 1900 to $1,690,000 in 1904; and the amount paid to policy holders increased from $164,000 to $500,000 for the same years.

The assets of the National Life are represented by strong collateral. The aggregate outstanding first mortgage loans, the safest form of investment and upon which better rates of interest are paid in the West than the East, was slightly over $1,600,000 in December, 1904, which sum was secured by property valued at over $5,000,000. The bonds and stocks, on the same date, had a market value of $2,480,000. The remaining assets, valued at $871,000, consisted of cash and miscellaneous loans to policy holders.

At the beginning of the current year the company's policy holders numbered 39,355; of this number 15,465 were in Illinois, and over 11,000 in the city of Chicago. The premium income in Illinois alone was $471,800 for 1904, an increase of $96,000 over the previous year. The total income from all sources during the year was $1,968,000 for 1904, and the total disbursements only $1,289,000.

As can be seen from the figures, the company's growth has been healthiest since the accession of Mr. Starnes to the presidency. Mr. Starnes is a native of Hancock county, Illinois, where he was born January 1, 1863. He received a public, high school and business college education, and then studied law. After practicing in Kansas for nine years he entered the insurance business, accepting an agency for one of the big eastern companies. After becoming state manager for several concerns, he organized the National Life & Trust Company of Des Moines, Iowa. In 1903 this was merged with the National Life, Mr. Starnes becoming vice-president and general manager of the united companies. In February, 1904, he was made president. Though one of the youngest, Mr. Starnes is recognized to be one of the ablest insurance men in the country.

A. M. Johnson, the vice-president and treasurer, is a young man. He was graduated from Cornell University in 1895. He was associated with his father in western railroad interests for a number of years. He became affiliated with the National Life in 1902, when he purchased a block of the stock. He is connected with a number of big enterprises in Chicago. Julian C. Harvey, the second vice-president, son of the late Augustus Ford Harvey, the eminent actuary, was connected with the Missouri insurance department, and was assistant secretary of the Covenant Mutual Life for seven years. He is a graduate of Washington University of St. Louis and an actuary by profession. Robert E. Sackett, secretary, is a native of Pittsford, New York. He was secretary of the Iowa Life Insurance Company from 1894 to 1900, and secretary of the National Life since the latter date. The board of directors of the National Life follows: Edward A. Shedd, director, Corn Exchange bank, Chicago; Albert M. Johnson, president, Fidelity Safe Deposit Company, of Chicago, and director of Broadway Savings & Trust Company, Cleveland; Charles B. Shedd, director, Knickerbocker Ice Company, Chicago; George A. Gilbert, manager Employers' Liability Assurance Corporation; Abner Smith, former judge of the circuit court, Chicago; James H. Stowell,

P. M. STARNES.

physician, Chicago; Stewart Goodrell, ex-insurance commissioner of Iowa; P. M. Starnes, Julian C. Harvey and Robert E. Sackett.

The home of the National Life, at 159 La Salle street, is one of the handsomest office buildings in the United States. It is the center of the Chicago insurance world, housing more insurance concerns than any other building in the city. The National Life occupies the entire ninth floor.

Joseph H. Lenehan, general agent for the Phoenix Insurance Company of Brooklyn and a well-known figure among the Chicago underwriters, was born at Dubuque, Iowa, where he received his early education in the public schools. He entered the insurance business there in 1880 as local agent. Five years later he was made manager of the Will County Insurance Company. From 1887 to 1892 he was Illinois state agent for the Insurance Company of North America and the Pennsylvania Fire. After assisting in the organization of the Palatine's western department, with which he was identified until 1898, he was appointed assistant manager of the western department of the North British

and Mercantile. In July, 1899, he joined the Phoenix as assistant general agent, becoming general agent in May, 1900.

Mr. Lenehan was married in 1883 to Margaret L. Littleton of Dubuque. They have three children living, Margaret L., Francis L. and Mary Calesta Lenehan. They reside at 4515 Greenwood avenue. Mr. Lenehan is a member of the Chicago Athletic Association, the Union League Club, the Washington Park Club, the Kenwood Club and the Glenview Golf Club.

JOSEPH H. LENEHAN.

J. Elliott Jennings, president of the real estate company that bears his name, and one of the most successful operators in Chicago, was born April 5, 1869, in the extreme backwoods of Arkansas, in a little log house about twelve or fourteen feet square, and worked on a farm during his early life. At the age of seven he plowed corn, split rails at ten, and at the age of eleven removed with his parents to Eureka Springs, Arkansas. There the drudgery of farm work was replaced by that of sawing, splitting and hauling wood, for which his earlier experience had adapted him. When he reached the age of fourteen he sought for more lucrative employment and started clerking in a store at Eureka Springs.

This was too commonplace for him, however, and he went with some others to Carterville, Missouri, and worked in the mines for a time. He then returned to Arkansas and, at the age of seventeen, entered the State University of Arkansas at Fayetteville.

He came north in 1889, and engaged in various pursuits, finally entering the office of one of Chicago's leading real estate firms. After having thoroughly familiarized himself with the business, he started in the real estate, renting and loan business on his own account at 100 Washington street, Chicago, in 1894. In the same year he was married to Miss Mae DaMond at Terre Haute, Indiana. After several years of strenuous work in the real estate, renting and loan business at 100 Washington street, he was selected, as one of the most competent and versatile real estate men in Chicago, to take the management of the real estate and real estate loan department of one of Chicago's down-town banks. Mr. Jennings consolidated his business with that of the bank and managed the real estate loan department on a partnership basis for several years.

In 1903, having tried out some of his theories concerning real estate loans and having found them workable, he organized and incorporated the Jennings Real Estate Loan Company, of which he is president and is the controlling factor. The Jennings Real Estate Loan Company is the most progressive and ably managed institution of its kind in the West.

Mr. Jennings lives in Evanston, has one son ten years of age, and is a member of all the Evanston clubs,

J. ELLIOTT JENNINGS.

and also the Glenview Golf Club. He is an expert golfer, a good horseman and an automobilist. He is a good example of what can be done by forcible, energetic and honest effort. Mr. Jennings is only thirty-six years of age, but he has accomplished more in a business way, perhaps, than many men have done in a lifetime.

CHAPTER XX.

BOARD OF TRADE.

HE Board of Trade typifies Chicago as no other institution in the city. It has made Chicago the food supply center of the world. It is the main factor in fixing the prices of grain and provisions for the civilized nations of the earth. Its name is synonymous with energy and progress. To the movement started over half a century ago by the founders of the Board of Trade may be traced the commercial greatness of Chicago. As the gateway for the flood of products from the farms and ranges of the Mississippi Valley and the West, the city stands as a monument to the foresight of the founders and the energy and integrity of their followers. Through the same gateway sweeps the flood of commerce that supplies the rich markets created by the granger wealth, and makes Chicago rank even greater, as the chief distributing point of the nation.

The Chicago Board of Trade had its beginning on March 13, 1848, when a group of business men gathered for the purpose of organizing an exchange by which they would be able to control and regulate their business affairs. From that date on, the Board of Trade has been a distinctive feature and influence in the business life of Chicago. The following firms signed the call for the first meeting of fifty-five years ago: Wadsworth, Dyer & Chapin, Geo. Steele, I. H. Burch & Co., Gurnee, Hayden & Co., H. H. Magie & Co., Neff & Church, John H. Kinzie, Norton, Walker & Co., DeWolf & Co., Thos. Richmond, Thos. Hale, Chas. Walker and Raymond Gibbs & Co. As a result of the meeting resolutions were drawn up and adopted, setting forth the benefits to be derived from a Board of Trade, and the need for such an organization. Committees were appointed to effect the organization and a meeting was held in April, at which resolutions and by-laws were adopted. Officers were elected as follows: Thos. Dyer, president; Chas. Walker and John P. Chapin, vice-presidents; W. L. Whiting, secretary, and Isaac H. Burch, treasurer. The first board of directors follows: Gurdon S. Hubbard, Elisha S. Wadsworth, Thomas Richmond, John Rogers, Horatio G. Loomis, George F. Foster, Richard C. Bristol, John H. Dunham, Thomas Dyer, George A. Gibbs, John H. Kinzie, Cyrenius Beers, Walter S. Gurney, Josiah H. Reed, Edward K. Rogers, Isaac H. Burch, Augustus H. Burley, John S. Read, William B. Ogden, Orrington Lunt, Thomas Hale, Edward H. Hadduck, Isaac V. Germain, Laurin P. Hilliard.

The roll of members for the first year contains names that have become famous in the history of the city. It follows:

Beals, Joseph R.
Beers, Cyrenius
Blaikie, Andrew
Brand, Alexander
Bristol, Richard C.
Brown, S. Lockwood
Burch, Isaac H.
Burley, Augustus H.
Carpenter, James H.
Carter, Thomas B.
Case, J. R.
Chapin, John P.
Clarke, W. H.
Cobb, Zenas Jr.
DeWolf, A. V. G.
DeWolf, William F.
Dodge, John C.
Drew, George C.
Dunham, John H.
Dyer, Thomas
Foster, George F.
Foster, Jabez H.
Gage, Jared
Germain, Isaac V.
Gibbs, George A.
Gurney, Walter S.
Hadduck, Edward H.
Haines, John C.
Hale, Thomas
Hardy, Isaac
Harmon, C. L.
Harrison, H. H.
Higginson, Geo. M.
High, John Jr.
Hilliard, L. P.
Hotchkiss, J. P.
Hubbard, Gurdon S.
Humphrey, D.
King, John Jr.
Kinzie, John H.
Laflin, Matthew
Loomis, H. G.
Lunt, Orrington
Marsh, John L.
Marsh, Sylvester
Morgan, T. S.
Neely, Albert
Ogden, Wm. B.
Pardee, Theron
Parker, Thos. L.
Payson, H. R.
Pearson, John
Peck, James
Raymond, B. W.
Read, John S.
Reed, Josiah H.
Richmond, Allen
Richmond, Thomas
Robb, G. A.
Rochester, Jas. H.
Rogers, E. K.
Rogers, John
Rumsey, Julian S.
Russell, J. B. F.
Ryerson, Joseph T.
Sherman, O.
Shoemaker, Jno. W.
Smith, George
Smith, J. A.
Stearns, M. C.
Steel, George
Stockbridge, F. B.
Thompson, Thomas
Throop, Amos G.
Wadsworth, E. S.
Walker, Almond
Walker, Charles
Walter, Joel C.
Whitcomb, T.
Whitney, W. L.
Winn, James
Winslow, H. J.

Sessions of the Board were held from then on daily in a small office about twenty feet square at 8 Dear-

born street. The trading hour was between eleven and twelve o'clock.

There were no railroads and very little lake traffic at that time, most of the produce and grain arriving in the city by wagons. Trading on the new exchange was for this reason very light, and transactions far between. The opening of the Illinois and Michigan canal brought a larger grain growing territory in touch with Chicago, was far from satisfactory, and the members decided to make an effort to increase and facilitate it by getting telegraphic communication with eastern markets. The trading hour was changed to nine o'clock in the morning, and new and larger quarters were secured on the corner of Fifth avenue and South Water street. During the next year a further advance was made by having the Board of Trade incorporated. This temporary boom

BOARD OF TRADE BUILDING.

and caused a large boom in the shipments in wheat and corn to the city. Not long after this the Galena & Chicago Union Railroad started in business, and brought more shipments here. The first year, however, of the Board of Trade was a quiet and uneventful one. At the first annual meeting in April, 1849, all the old officers were elected, excepting W. L. Whiting, in whose place John C. Dodge became secretary.

The nature and the bulk of the business the first year was, however, short-lived, and during the next year, in 1851, little interest was taken in the new exchange. In fact, days would pass when not a single member would attend. Various expedients were adopted to stimulate interest. One of these was to set up a free lunch. Liberal supplies of beer, cheese and crackers made the exchange for a time quite popular, and the attendance was comparatively large. Some of the present members still recall the free lunch campaign, and have lived to see

the day when memberships of the Board are worth $4,500, and the floor, and even the visiting galleries, are crowded daily.

Things continued in a rather perfunctory way until the fourth annual meeting in April, 1853. The membership roll at that time contained fifty-three names. Another year of struggle followed, but in 1854 the exchange came into its own. The wave of prosperity that started at that time has continued ever since. The railroads began to build into Chicago and the lake carriers rapidly grew in number. The settlement and cultivation of millions of acres to the west and northwest and the geographical position of the city at the head of the lakes have all contributed to make Chicago the greatest grain and produce market in the world. The first shipment of wheat in 1838 comprised 78 bushels. In twenty years the trade had increased to 8,500,000 bushels. The first shipment brought 38 cents a bushel. The highest price between this and 1845 was 55 cents, while the average price for the next nine years was close to 60 cents a bushel. The Crimean war sent the prices for American grain soaring. In 1854, 1855 and 1856, the prices went to over $1.00 a bushel, rising as high as $1.31 at one time.

The exchange moved its quarters in 1855 to the corner of South Water and La Salle streets. It occupied the entire third floor, and during the next year 167 new members were added. The trading in futures was begun, but it was hardly what might be called a speculative trade. In 1859 another boom struck the wheat trade. The Austro-Sardinian war sent the prices for red winter wheat soaring to $1.73, and for spring wheat to $1.30. This was the real beginning of the boom times for the Chicago Board of Trade. Grain and produce began to pour into Chicago in large and ever-increasing quantities. The establishment of the stockyards and packing houses added to the growth of the Board of Trade. The city was also rapidly advancing in population and commercial importance. About this time the Board of Trade moved to the second floor of the Chamber of Commerce building at La Salle and Washington streets. Then followed the Civil war period in which the wild speculations in gold and grains still further increased the business of the board. The great fire of 1871 wiped out the Chamber of Commerce building. On the Monday following, the Board of Trade met on Canal street, between Washington and Madison, and passed resolutions urging the owners of the Chamber of Commerce building to erect at once a larger and more expensive structure. The members also voted a large amount of money for the relief of the destitute, and in a few days resumed its sessions as usual, remaining in these quarters until the construction of a temporary building at Market and Washington streets. When the Chamber of Commerce was rebuilt the Board of Trade moved to its quarters there in 1872. The importance and growth of the exchange continued uninterrupted until the early 80's, when the need of a building of its own became more apparent, and it was decided to build the present magnificent structure. In 1884 the final move was made to its present home, the Board of Trade carrying with it to that section of the city much of the grain, banking and brokerage business of Chicago.

The Board of Trade has always taken a leading part in the great patriotic and civic movements in Chicago. During the war it led the patriotic sentiment that fired the city. It fitted out the Board of Trade battery and two regiments of infantry, and presented them fully armed and equipped to the government. During the war these soldiers were carefully looked after by the Board of Trade. In addition to this the Board contributed largely to the organizations of the Mercantile battery, and did much towards supplying hospital stores and other supplies. Captain Stokes of the Board of Trade battery, and a member of the exchange was credited by General Rosecrantz with saving the day at Stone River. The captain of Taylor's battery, another Board of Trade member, also made an excellent record. In fact, no military organization during that terrible conflict acquitted themselves with more credit than did those equipped and organized by the Chicago traders. The history of the Board of Trade since 1854 is one of continued prosperity. Its transactions run into the millions of bushels daily, while its quotations dominate the markets of the world. There have been periods of wild and persistent speculation, but this has rather tended to help than to still legitimate business. The farmers of the country have profited by many millions by the efforts to control the markets for wheat and corn, as well as for the products of the packing houses. Most of the corners attempted on the Board of Trade have been disastrous failures.

Among those who have filled the office of secretary of the Board of Trade, the names of Charles Randolph and George F. Stone, the present incumbent of office, stand out prominent. Secretary Randolph held that office through the great fire, and for sometime afterwards. Mr. Stone has filled the position for the last twenty-one years, and has done much by his tact, ability and wisdom to add to the good name and fame of the Chicago Board of Trade.

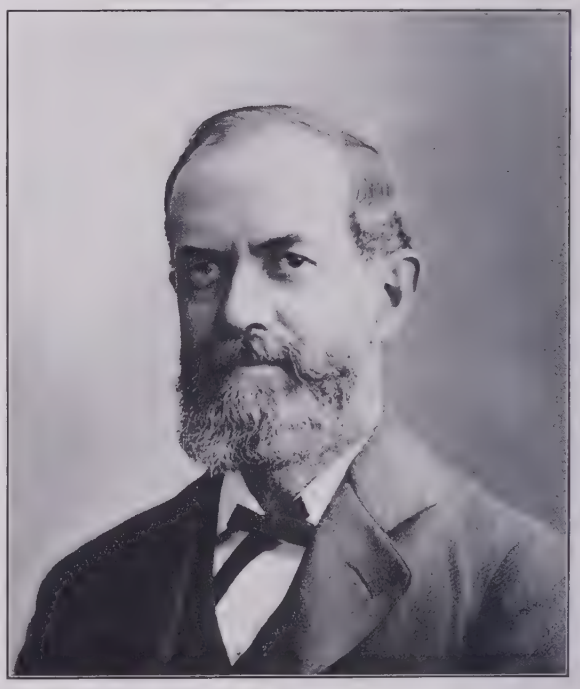
The present officers of the exchange are: William S. Jackson, president; Walter Fitch, first vice-president; John H. Jones, second vice-president; G. F. Stone, secretary; E. A. Hamil, treasurer. The board of directors follows: John B. Adams, Emil W. Wagner, Robert Bines, Geo. W. Patten, Walter Comstock, Paul Tiet

gens, J. Herbert Ware, A. Stamford White, John T. Sickel, James Crighton, Hiram N. Sager, J. Finley Barrell, John F. Harris, Edward Andrew, James Bradley.

The Albert Dickinson Company was organized in 1888, succeeding the business of Albert Dickinson, the latter of which was the outgrowth of a general grain, produce and seed business, founded in 1854 by Albert F. Dickinson. Its founder, who was one of the oldest members of the Chicago Board of Trade, was engaged in business between Dearborn avenue and State street, on Kinzie street. In the great fire of October, 1871, everything was lost, excepting a memorandum of the debts which the firm owed. The blow was a severe one, and the elder Dickinson's health was failing, but in 1872 his two sons, Albert and Nathan, who had been engaged with him in the business, together with their brother, Charles, who at that time was but fourteen years of age, gathered up the remnants of the business and carried it on for sixteen years, under the name of Albert Dickinson. Doing all the work themselves, the three brothers, aided by their sister, Melissa, who did the bookkeeping, were able to wipe out the debts with which they started, and place the business on a substantial and paying basis. The quarters on Kinzie street were finally outgrown, and the company rented part of the old Empire warehouse on Market street, only again to remove a few years later to the corner of Clark and Sixteenth streets, where large elevators and commodious offices were erected. In time, however, even these quarters became too small, and an office, built especially for their purposes, was erected by the Chicago Dock Company, on their property on Taylor street, into which the company moved on May 1, 1898. The business of the Albert Dickinson Company extends over a large part of the world, and they are buyers, as well as sellers, in all the large foreign markets where goods in their line are handled. They make a specialty of clover, flax and grass seeds, and do an extensive business in bird seed, popcorn, grain bags, seed grains, etc.

The officers of the company are: Albert Dickinson, president; Charles Dickinson, vice-president; Nathan Dickinson, treasurer; Charles D. Boyles, secretary. Its board of directors consists of Albert Dickinson, Charles Dickinson, Nathan Dickinson, Charles D. Boyles, O. E. Harden.

Albert Dickinson, president of the Albert Dickinson Company, was born at Stockbridge, Massachusetts, October 28, 1841, and is the eldest son of Albert F. and Ann Eliza (Anthony) Dickinson, both of whom were natives of western Massachusetts. Mr. Dickinson came to Chicago with his parents in 1855, and was educated in the public schools of this city, being a member of the first class to be graduated from the Chicago High School. After graduation he entered the office of his father, who had established himself in the grain and produce business shortly after coming to Chicago, and remained there until the outbreak of the war in 1861. In April of that year he enlisted in Company B of the Chicago Light Artillery, known as Taylor's Battery, and later as Company B of the First Regiment, Illinois Light Artillery, and remained in active service some three years and three months. He was among those who saw a great deal of action. He was engaged in the first fight at Fredericktown, Missouri, and he was also in the engagements at Donelson, Shiloh, Corinth and Vicksburg. After the



ALBERT DICKINSON.

victory at the latter point his battery was sent to Memphis, from whence they marched to Chattanooga, arriving in time to take part in the battle of Missionary Ridge, and later moving to the relief of General Burnside at Knoxville. He served throughout the Atlanta campaign the following spring and was mustered out in July, 1864.

Upon his return to civil life, Mr. Dickinson commenced business at Durant, Iowa, but was shortly afterward called to Chicago by his father's failing health, and at once took the responsibilities of the business upon himself, and actively commenced the duties of manager, continuing it in his own name, with the assistance of his brothers and sister, all of whom worked together.

The misfortunes felt by the great fire had to be shouldered by Albert Dickinson and his associates, but

under his management past disasters were wiped out, and, through continual efforts, the business has been built up to its present large proportions. Until about 1874 a general commission business was transacted, but after that time the handling of seeds was made an exclusive business. The business was run in the name of Albert Dickinson until 1888, when a stock company was formed, and the firm became known as the Albert Dickinson Company, which to-day does the largest business in seeds, particularly grass and field seeds, of any establishment in the world.

Mr. Dickinson finds his greatest recreation, strange as it may seem, in hard work, and it is to this that he attributes the greater share of his success in the business world. His whole efforts are, and always have been, given to the development and management of the Albert Dickinson Company.

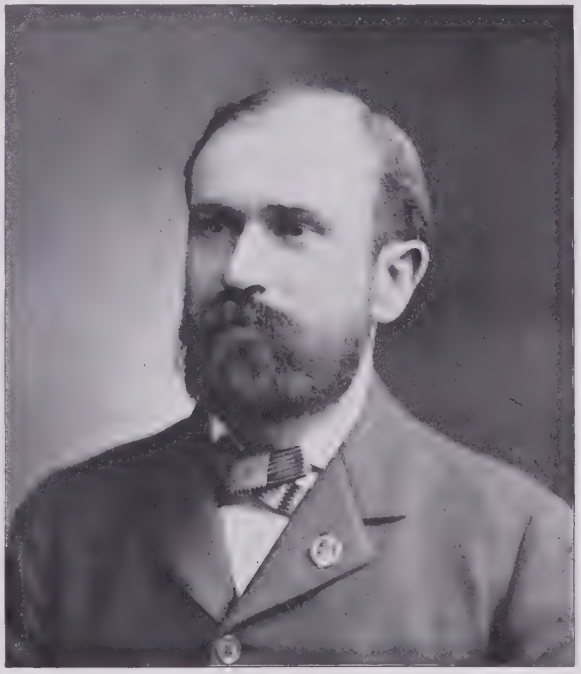
Mr. Dickinson has for some years been much interested in the welfare of the Chicago Academy of Sciences and has been a liberal contributor to its needs. He is also president of the Timewell Sack Filling and Sewing Machine Company, a new labor-saving device, and the only successful machine in the world, for filling bags and sewing them.

NATHAN DICKINSON.

Nathan Dickinson, treasurer of the Albert Dickinson Company, was born at Curtisville, Massachusetts, in February, 1848, and is the second son of Albert F. and Ann Eliza (Anthony) Dickinson.

He came to Chicago with his parents in 1855, and was educated in the public schools of this city, being graduated from the Dearborn School in 1865. It was soon found that his services were needed in the business then being conducted under his father's name, and he accordingly began business life under the latter's instructions. He has remained continuously in the establishment ever since, and for many years has occupied the position of treasurer.

Charles Dickinson, vice-president of the Albert Dickinson Company, was born at Chicago on May 28,



CHARLES DICKINSON.

1858, and is the youngest son of Albert F. and Ann Eliza (Anthony) Dickinson. He attended the public schools of this city until he was fourteen years of age, attending the high school in the mornings and working for Charles Gossage & Company, dry goods merchants, in the afternoons, at the very meager salary of $1.50 a week.

In 1872 Mr. Dickinson became associated with his two brothers, Albert and Nathan, who were engaged in carrying on the business originally started by their father, Albert F. Dickinson, and which needed their united attention, due to the losses sustained in the great fire of the previous year.

The business was then being conducted on a general commission basis, and it was not until some years later that seeds came to be handled exclusively. Charles Dickinson was thus thrown into contact with the world at a very early age, and it stands as a matter of record that he was one of the youngest operators on the Board of Trade, he having begun active trading in his seventeenth year. The Albert Dickinson Company was organized in 1887-1888, and his connection with this

company, of which he is vice-president, has continued uninterruptedly.

Mr. Dickinson has been fortunate, in that he has traveled extensively, and has gained much from the broadening influence which always results from a wide contact with one's fellow-men. His first trip abroad was in 1880, at which time he spent some months in traveling through Europe. Three years later he again visited Europe, and this time extended his travels south into Africa, not neglecting the many other points which could be conveniently touched while en route.

Again in 1894-1895 he spent ten months in Russia, Germany, France, Denmark, Turkey and other countries of continental Europe. While his travels have been extensive, and for the most part of a business nature, Mr. Dickinson has not failed to visit points of commercial and historical interest, thus combining pleasure with business, and receiving a twofold benefit.

Mr. Dickinson is vice-president of the Chicago Dock Company, is president of the Chicago Moto-Cycle Company, and is president of the Chicago Polyphone Company, an organization for the manufacture of an improved talking machine. He is a member of the Union League, Chicago Athletic, Illinois, Germania and Menoken clubs, and a trustee of the Chicago Academy of Sciences. He is married and resides at 603 Dearborn avenue.

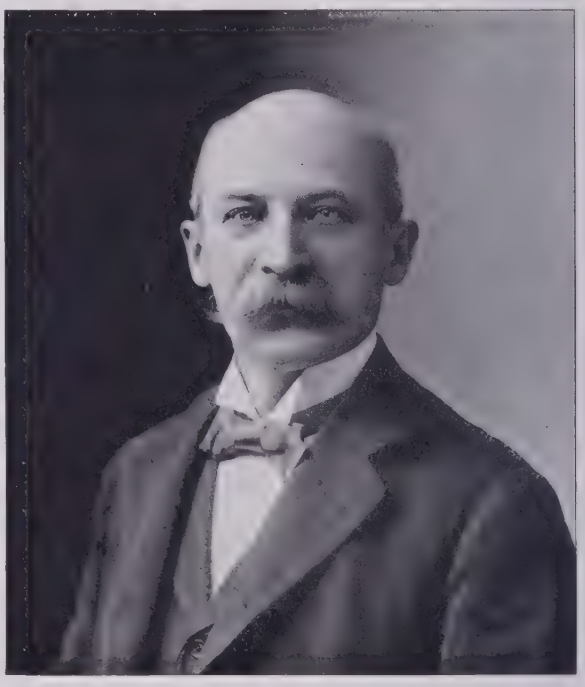
CHARLES DICKINSON BOYLES.

Charles Dickinson Boyles, secretary of the Albert Dickinson Company, was born in Chicago, August 1, 1865. His parents were Charles C. and Hannah (Dickinson) Boyles.

Mr. Boyles received his education in the public schools of this city, which he attended until he was sixteen years of age, at which time he entered the employment of the Albert Dickinson Company as an office boy. He has since remained continuously in the service of this company, and became secretary of it in 1889.

He is a member of the Union League and Ashland clubs.

Henry F. Vehmeyer, president of the Chicago Dock Company, was born in Hanover, Germany, March 7,



HENRY F. VEHMEYER.

1845, the son of Christian and Elizabeth (Meyerding) Vehmeyer. When he was six years old his parents came to this country, and settled in Chicago, where, until he reached the age of fourteen years, he attended the public schools. At this time, however, he secured a humble position in a grocery store, on the West Side, where he was employed for about two years, at the end of which time he engaged in the management of a small grocery, which his father had purchased, on the corner of Adams and Throop streets. For thirteen years he continued in the grocery business, half of the time at the previously mentioned location, and half of this period at the corner of Ann and Lake streets.

Mr. Vehmeyer first became a stockholder and director in the Chicago Dock Company in 1890. Some three years later he became president, in which capacity he still continues.

Irwin, Greene & Company is one of the best known firms on the Chicago Board of Trade, having been founded in 1854 by D. W. Irwin. From that time to

the present they have constantly extended their activities and now do an extensive business as shippers, receivers and grain merchants. It is known as one of the conservative firms in this line of business, and numbers among its customers many of the best known investors in Chicago.

Charles David Irwin, the senior partner, is the son of D. W. and Harriett L. (Nash) Irwin. He was born

CHARLES DAVID IRWIN.

in Albany, New York, April 19, 1859, and his father brought him to Chicago when he was but a child. He is practically a Chicago product, having been educated in the Chicago South Division schools, and grew up with the city. In 1881 he married Miss Hattie F. Duryea of Nyack, New York, and their children are Jessie N. and David D. Irwin. It was his father's desire that his son should succeed him in the firm of Irwin, Greene & Company, and when Mr. Irwin left school he entered the firm. He was made a partner in 1881, the year of his marriage, and, upon his father's death, succeeded to the latter's interests.

Mr. Irwin has always been an independent in politics and is a Presbyterian. He is a member of the Union League Club and resides in Evanston. The office of the firm of Irwin, Greene & Company is in the Postal Telegraph building.

John Cudahy, son of Patrick and Elizabeth (Shaw) Cudahy, was born at Callan, County Kilkenny, Ireland, November 2, 1843. His parents came to this country when he was but six years of age, and after a short time spent in the New England states came West and settled in Milwaukee. He attended the public schools of that city until he was fourteen years of age, when he secured a position in the packing house of Ed. Roddis, and started in to learn the rudiments of the business, with which he was to become so closely identified in after life. He remained in the employ of this house for about three years, leaving them to enter the establishment of John Plankinton, afterward known as Plankinton & Armour.

His connections with this firm lasted until he was twenty-one years of age. At that time he became associated with Thomas Grynne of Milwaukee in the nursery business, dealing in fruit and ornamental trees, and a few years later purchased the business, conducting it under his own name until 1870. He paid but a small sum down at the time of securing control, but managed it so well that at the time he disposed of it he had not only cleared himself of debt, but made a considerable bit of money besides.

Having disposed of this business, he once more entered the packing industry, this time in the employ of Layton & Co., packers. While in their service he was

JOHN CUDAHY.

appointed Board of Trade provision inspector for the city of Milwaukee, and later became foreman and Board of Trade inspector for Van Kirk & McGeough.

In 1875 he purchased an interest in the business of John Plankinton, but a few months later, deciding that the field of operations was not just what he wanted at the time, he secured a release from his contract, and came at once to Chicago, where he formed a partner

ship with Mr. E. D. Chapin, under the firm name of Chapin & Co., packers, the business being under this name for two years, when it became known as the firm of Chapin & Cudahy. A few years later Mr. Chapin withdrew, and since that time Mr. Cudahy has conducted the business under the name of the Cudahy Packing Company. Some years ago Mr. Cudahy, together with his brother Patrick, purchased the business of John Plankinton of Milwaukee, which has been carried on under the name of Cudahy Brothers Company, packers.

In the life of Mr. Cudahy we certainly find a good example of what can be accomplished by industry, perseverance and, above all, business integrity. These qualities would have made him prominent, no doubt, in other lines of business, and it may be truthfully said that the success he has achieved and the prominence he holds to-day are the natural results of these characteristics, together with others which are to be found in men that have made their own way.

Chicago certainly owes much of her prosperity to men like Mr. Cudahy. A liberal-minded citizen, possessed of the highest ideals in all things, he has freely contributed his wealth in the aid of many charitable and public undertakings. Personally, he is a genial companion, and, although his entire attentions are given to his business, he finds time to mingle with his fellowmen. He is very fond of outdoor recreation, and has a beautiful summer home on Mackinac Island, where he spends much of his time during the summer months. He is a member of the Washington Park Club, the Union League Club and the Chicago Club, besides holding membership in many other social organizations.

Mr. Cudahy has been twice married, the first time in 1873, to Miss Mary Nolan of Bridgeport, Connecticut, and the second time, in 1881, to Miss Margaret F. O'Neil, daughter of the late Mr. John O'Neil, one of Chicago's most respected citizens. He has two daughters and one son.

Edward William Bailey, a member of the Chicago Board of Trade, was born at Elmore, La Moille County, Vermont, August 31, 1843. His parents, George W. and Rebecca Warren Bailey, were natives of Berlin, Vermont. The Bailey family is of Scotch lineage.

Edward W. Bailey is the youngest of ten children. His education was obtained in the public schools and in Washington County Grammar School at Montpelier. At the age of seventeen years he assisted his father in the management of the homestead farm, thereby developing a strong muscular frame, and acquiring strength and endurance, which in the after years stood him in good stead in the strenuous battle of Chicago life. He also inherited the upright character and conscientious principles for which his progenitors had been conspicuous. In 1869 he purchased a grocery store at Montpelier, and the following year he and his partner increased their business by the addition of a grist mill. When the firm dissolved a few years later, Mr. Bailey retained the mill and still continues to own and operate the same.

In 1879 he located in Chicago, and formed a partnership with V. W. Bullock for dealing in grain on commission. After the first three years Mr. Bailey became the sole proprietor of the business, and now occupies commodious quarters in the Board of Trade building. Mr. Bailey's business career has been strik-

EDWARD WILLIAM BAILEY.

ingly successful, and he has an enviable reputation for honorable dealing and integrity of character.

Mr. Bailey holds liberal views on religious subjects, and was for many years a member of the congregation of the late Prof. David Swing. Mr. Bailey's religion in a nutshell may be defined as a praiseworthy aspiration to do unto others as he would wish others to do unto him. Mr. Bailey never fails to exercise the right—as well as the duty—to cast his vote. He supports Republican principles, believing the Republican party to represent the best social and economical ideals Emphatically a man of resolution and prompt action, he holds a creditable place in the business and social world of Chicago.

William H. Lake, senior member of the firm of W. H. Lake & Company, commission merchants, is one of the most successful of the younger Chicago Board of Trade brokers. He was born in Chicago in 1861 and entered the commission business with Dwight

& Gillette in 1877. Later Mr. Lake took a position with Charles Counselman & Company, and still later he became connected with Bartlett, Frazier & Company, where he held a superior position until 1901. In that year he established himself in business and formed the firm of W. H. Lake & Company, with the entire first floor of the premises at 6-8 Sherman street as offices and customers' rooms. At the present, Mr. Lake—"Billy Lake" as he is better known among his competitors and numerous friends—is considered one of the representative commission dealers of the Middle West.

Mr. Lake is a member of the Chicago Board of Trade, Chicago Stock Exchange, New York Produce Exchange, Milwaukee Chamber of Commerce, St. Louis Merchants' Exchange and the Minneapolis Chamber of Commerce. He is a director of the Chicago Athletic Association, and member of the Washington Park Club, Glenn View Golf Club, Edgewater Club, Chicago Automobile Club, Chicago Yacht Club and North Shore Club. He has a daughter aged sixteen and a young son.

WILLIAM H. LAKE.

GARFIELD PARK.

CHAPTER XXI.

CHICAGO THE CATTLE MARKET OF THE WORLD.

FOR half a century Chicago has been pre-eminent as a cattle market. During that time it has grown from a small beginning to the greatest meat packing center the world has known. The stock yards are still the wonder of every visitor who comes to Chicago, from far and near.

It was in 1848 that the first step in founding this tremendous industry was taken. A vacant lot at Madison street and Ogden avenue was rented by several stock men, and a few pens built. It was known as the "Bull Head" stockyards, and a few hundred cattle, sheep and hogs were handled there every year. The slaughtering was done entirely for local consumption by a few small butchers. All the cattle were raised within a radius of less than 100 miles, and they were driven in by the owners and sold direct to the butchers without the advantage of a fixed market price. The nearest butcher was at Halsted and Madison streets, and in this way the great West Side highway, Madison street, was first marked out by the hoof tracks of the cattle, sheep and hogs.

The next step in the development of this great industry was taken by the Michigan Southern Railroad, which had begun to haul no inconsiderable number of stock from the farmers of Michigan and Indiana. It was not convenient or profitable to drive the cattle from the southern entrance of the town to the West Side stockyards and the railroad opened a stockyards of its own at Twenty-second and State streets. In a few years this example was followed by a number of other roads. In 1856 the Illinois Central and Michigan Central encouraged John B. Sherman to build the Myrick stockyards far out in Cottage Grove avenue. It could handle 5,000 cattle and 30,000 hogs, and the roads built switches to it. This was followed by a rival yard in Cottage Grove avenue by the Fort Wayne Railroad, and soon after the Burlington put up a yard of its own near Ashland avenue, along its right of way.

The cattle industry was handled in this way until near the close of the war, when the importance of the business clearly indicated that some consolidation must be had to put it on a firm business basis. The great cattle ranges of the West and Southwest began to look to Chicago for a market. Kansas, Texas and New Mexico, Nebraska, Iowa, Colorado, Missouri and Illinois, Indiana and Michigan began to send avalanches of cattle into the Chicago market. Chicago was becoming the meat supply center of the nation.

The leading spirits of the small scattered yards came together for mutual profit and protection. The result of that conference was the present Union Stockyards and Transit Company, which with its allied industries and interests form the richest mercantile and manufacturing achievements in the history of the world. The original prospectus was issued in 1864, and called for a stock subscription of $1,000,000. In February of the next year, a special charter was obtained from the state and the company formally organized with the following officers: Timothy B. Blackstone, president; F. H. Winston, secretary, and Robert Nolton, assistant secretary.

To-day more than a quarter of a million people derive their support direct from it in Chicago alone. The activities which have grown up from this beginning and which center around it, represent the most costly, the most productive and most potential single manufacturing industry in history.

The first purchase of a site included 320 acres bought of John Wentworth along Halsted street, in the town of Lake. It was a low marshy tract, and considered of

no practical value. The work of draining it, and erecting the sheds and pens began in June, 1865, and by the close of that year was thrown open for business. The yards were laid out as a small town, with streets and alleys. These have been paved and planked, as the yards grew, and now there are over twenty-five miles of such highways in the stockyards. It has been increased from time to time until it now includes over 500 acres.

To-day Chicago remains supreme in the cattle business of the world. Favored by its location, rising equal to every demand put upon it for facilities, with intense concentration and economy of method, and handling of raw material. Not a hair or drop of blood of the first asset, the live cattle, is lost. Nothing is wasted, neither time nor offal, and from the savings from this incalculable economy in the utilization of every by-product the stupendous fortunes of the Armours, the Swifts, the Morrises, the Cudahys and others have been built up.

This policy has brought about the concentration of allied interests which in turn has resulted in making the Chicago stockyards what they are and maintaining

VIEW OF ARMOUR & COMPANY'S PLANT.

a spirit and enterprise capable of meeting the changes and developments of conditions, it has been unaffected by the growth of allied enterprises in other Western cities. The output of the stockyards and the great packing plants have steadily increased despite the fact that a half dozen other towns, Omaha, Sioux City, Kansas City, East St. Louis, Wichita and Fort Worth, have all developed greater packing and stockyards interests than Chicago, in the beginning of its stockyards, ever dreamed. Its growth, price-fixing power and the increase of the output has remained undiminished, and assured.

This unchallenged position is the result of the most them in their unchallenged supremacy. Jonas Howard in describing how these industries are interwoven, and interdependent says: "Canned meats and fresh beef, mutton and pork are not the limitations of its efficiency. Tooth brushes, buttons, hair brushes, chessmen, knife handles, fertilizers, soaps, perfume, chewing gum, teething rings, tooth powder, shaving sticks, razor strops, penholders, glue, pistol butts, powder puffs, jet ornaments, paper cutters, hat racks, mounted horns, a thousand articles of art, utility, and commerce that were never dreamed of by the cattle butchers of twenty years ago, to-day are sold in millions of dollars worth from the Chicago stockyards and their tributary establishments.

"Nothing could have achieved these wonderful results but the concentration in one place of a score or more of various though not conflicting interests. The packers of Chicago stockyards have littered the deserts and morasses, and the tenantless mountains of the world with their meat cans. They have fed armies and explorers; by sheer dint of their usefulness they have made of a coarse, utilitarian trade an influence in the march of civilization, an especial condition in the progress of mankind."

A glance at the daily performance of the Chicago stockyards of the present will make the initial achievements seem puerile and trivial. It has a capacity now of 75,000 cattle a day, 300,000 hogs, 125,000 sheep and 6,000 horses. Three hundred miles of railroad tracks gridiron it. There are 13,000 open pens, 8,500 double-decked inclosures for sheep and hogs, 25,000 gates and a complete water and drainage system. In fact the stockyards are a city in themselves, giving employment to 50,000 men, and an army of women and girls. During Chicago's centennial year there were received 3,440,000 cattle, 272,000 calves, 7,828,000 hogs, 4,584,000 sheep and 100,000 horses. Of these 2,171,000 cattle were slaughtered, 245,000 calves, 6,595,000 hogs and 3,584,000 sheep. The value of the stock shipped to this great cattle center during 1903 was over $311,900,000. In the process of manufacture into the various food products and other products of the allied industries, this value was tremendously enhanced.

But it is not alone in the value and number of cattle handled and slaughtered, not in the extent and area of the yards that their tremendous potentialities can be measured. Every conceivable device for the utilization of and expeditious handling of this great product of the farms of the nation is installed. Labor is made to produce to the limit of its efficiency. The stockyards of Chicago represent the consumption of mechanical speed with commercial utilities. Minutes lost are figured as weight and money lost.

No two cities in the state of Illinois, outside of Chicago could furnish the men, boys and girls to do the work daily performed at the stockyards. The employees of this tremendous enterprise and its allied industries, with their families, would make a city second in size in the state, in fact, three times as large as any other outside of Chicago. It might be safely stated that half a million people are more or less dependent upon this monumental centralization of business activity for their livelihood.

Within the past five years there has been added to the stockyards activities the annual live-stock exhibition, with a purpose to raise the standard of American bred cattle and horses. These competitive exhibitions have been tremendous successes. Thus, Chicago, has not been content with merely being the great meat food supply depot of the world, but has determined that the world shall have better meat, better horses and quicker service.

Armour & Company. Very few people realize the enormous extent of the packing industry in Chicago, which has been gradually developing during the last fifteen or twenty years. Armour & Company, only one of several firms engaged in that business, have a daily average killing capacity of 49,000 hogs, 21,000 sheep and 16,000 cattle, an average of 86,000 head of live stock per day, which, counting 300 working days to the year, makes a total of 25,000,000 head per year.

The area of land occupied by the several packing plants of Armour & Company is as follows:

	Acres.
Chicago	160
Kansas City	65
Omaha	31
St. Louis	29
Sioux City	14
Fort Worth	16
Total area	315

The total output of these establishments, including dressed beef, hams, bacon and six hundred or more by-products, averages annually more than $200,000,000 in value and includes many curious and interesting features. People know very little of the enormous variety of articles manufactured in connection with the slaughter-house business from which the packers derive their profits. For example, Armour & Company manufacture from twenty-five to thirty miles of sandpaper every day and an equal amount of emery cloth, which is used by the furniture factories, shoe factories and others.

Armour & Company have between 6,500 and 7,000 employees connected with the administrative and commercial departments, from managers to messenger boys, and between 18,000 and 20,000 persons engaged in manual labor at their several plants. The pay roll amounts to about $16,000,000 a year. These employees are scattered among more than 600 branch houses in different parts of the United States and foreign countries. There is not a city of any size in the world at which the company is not represented. They own 5,000 refrigerator cars for the transportation of meats, chickens, eggs, fruit and packing-house products. Their different plants in the West and Southwest are connected by about 5,000 miles of private telegraph wire, and from sixty to seventy-five telegraph operators are employed, according to the season.

Everything about the Armour packing plant is done by electricity and the most ingenious automatic contrivances. There is an elevated railway running between buildings and through all the streets and alleys, with

over five miles of track, ten electric motors of twenty-five horsepower each, and 3,000 cars built in different styles adapted to the special purposes for which they are used. It is the only railroad of the kind in existence, and its utility was shown last year, when 375,000,000 pounds of meat and other products were transported from cutting floors and factories to warehouses and railroads for domestic and foreign transportation.

The power plant of Armour & Company is one of the largest in the world, covering a ground space of 200 feet square and up to date in every feature. The coal and ashes are handled by automatic gravity contrivances. The boiler plant consists of twenty-four vertical water tube boilers of 375 horsepower each, and will be increased by 1,200 horsepower within a few months. There are four massive refrigerating machines, two of 400 tons and two of 600 tons capacity daily, which will be increased by 1,200 tons capacity very shortly. The entire plant is as nearly fireproof as can be made, but as an additional precaution a thoroughly equipped fire department is in complete readiness for instantaneous service day and night. The most modern appliances for the detection of fire have been supplied and watchmen are on duty everywhere.

The canning department is also the largest in the world. Cleanliness is the chief characteristic, and no private kitchen in the land is neater. By the use of machinery manual labor has been reduced to a minimum, and long continued chemical experiments have enabled the cooks to retain all the natural flavors of the different meats they handle. The laboratory is under the charge of a chief chemist, with ten assistants, who are always busy making tests and devising novelties for the meat department.

Armour & Company build their own cars, and have a tin factory, where all their cans and pails for preserved meats and lard are manufactured. There is a complete printing establishment also, where they do all their own lithographing and printing and manufacture their own books and stationery. In fact, everything except the raw material is made on the ground.

Swift & Company. The beginning of every large and important industry has almost without exception been actuated by some big idea generated in the mind of one whose faith was predominant.

In the case of Swift & Company at least this was true. Gustavus Franklin Swift, whose early life was spent as a Cape Cod farm boy, started the business which has evolved into the present Swift & Company.

First as a seller of meat among his neighbors, then as an employee to a local butcher, and later as a partner in a successful stock commission business—finally Mr. Swift began business in Chicago in 1875. This

ARMOUR & COMPANY'S GRAIN ELEVATORS.

was in the early days of the Chicago Union Stock Yards.

Competition, however, had already arrived and corporations headed by such business giants as P. D. Armour, Nelson Morris, Michael Cudahy and G. H. Hammond were laying lines for larger growth.

During the first year of Swift Bros. & Company the business was mainly buying and selling cattle. Slaughtering was not installed until a year later.

It was also during the early winters at the yards that Mr. G. F. Swift experimented with the shipping of dressed beef to eastern markets. His efforts were so successful that the business took on great impetus. To-day G. F. Swift is the name most mentioned as the man whose courage and faith made possible the refrigerator car, which has long since revolutionized the stock and fruit industry.

In 1883 by-products were first utilized by the refining of beef suet for oleo oil.

In 1884 sheep killing was installed and in 1885 hogs

were first butchered. The same year Swift & Company was incorporated for $300,000. December 1, 1886, however, this capital stock was increased to $3,000,000. This latter amount was increased gradually until in January, 1904, the capital stock became $35,000,000.

The Chicago plant occupies nearly fifty acres. Six other plants, occupying an area of nearly two hundred acres, are located one in each of the following cities: Kansas City, Kansas; Omaha, Nebraska; East St. Louis, Illinois; St. Paul, Minnesota; St. Joseph Missouri; Fort Worth, Texas.

VIEW OF SWIFT & COMPANY'S PLANT.

These plants supply the branch distributing houses to be found in every important city in the world.

Swift & Company's main plants are immense institutions, built and equipped after the most modern and systematic plans. Beef, mutton, pork, provisions and all packing house products are prepared in large quantities.

The General Offices at Chicago occupy a building erected in 1903 to take the place of the old General Offices destroyed by fire in July, 1903. This new building is 100x200 feet, five stories high, and built of steel and brick. It is a noteworthy structure, even in a city of magnificent and costly buildings, and is considered the finest office building in the world, devoted to the interests of a single firm.

Swift & Company is distinctly an American enterprise, conducted after genuine American ideas, energy and push. Wherever this company has sought sales in other countries the same American business acumen has won. It employs a vast army of individuals, which furnishes support for a large number of people.

Officers: E. C. Swift, chairman; L. F. Swift, president; E. F. Swift, vice-president; L. A. Carton, treasurer; D. E. Hartwell, secretary.

Directors: E. C. Swift, Boston; L. F. Swift, Chicago; E. F. Swift, Chicago; L. A. Carton, Chicago; J. R. Redfield, Hartford; Dumont Clarke, New York.

Magnitude of Transactions.—Here are some of the figures which tell the story in a nutshell—the transactions of Swift & Company.

During the year 1904 the company slaughtered over 8,250,000 head of livestock. The total distributive sales for the same period exceeded $200,000,000.

The total shipments of product during 1904 averaged over 350 carloads for each working day.

The total number of persons employed in all packing plants and branch houses aggregates over 25,000 workers.

One Day's Slaughtering.—In a single day the total slaughtering in the seven packing plants was as follows:

Cattle	11,895
Sheep	16,553
Hogs	34,562

The largest number of poultry slaughtered in a single day during 1904 was 62,382.

SIZE OF PLANTS.

	Buildings Acres.	Floor Space Acres.	Land Acres.
Chicago	44½	87½	47
Kansas City	7⅝	30	19½
Omaha	6	26	23
St. Louis	7¾	19⅞	31¾
St. Joseph	6½	25¼	19¼
St. Paul	5	12	16
Fort Worth	3	15	22

Awards for Best Products.—Swift & Company's products have received the highest awards at all the international expositions.

At the Paris Exposition of 1900, four gold medals

were awarded to Swift & Company for a refrigerator car and contents, for dressed beef, pork and provisions, including Premium Hams and Bacon and Silver Leaf Lard.

The principal specialties prepared by Swift & Company are: Swift's Premium Hams, Swift's Premium Bacon, Swift's Silver Leaf Lard, Crown Princess Toilet Soap, Wool Soap, Swift's Pride Soap, Swift's Pride Washing Powder.

Nelson Morris & Company is the oldest packing firm in Chicago. Business was commenced in a portion of the present building on June 17, 1879, but Mr. Nelson Morris had personally been conducting a packing business for some years on the site of his present gigantic Chicago house. His business is the outgrowth of a butcher business which Mr. Morris started in 1858, or ten years before the foundation of Armour & Company.

Two weeks after the establishment of the present firm of Nelson Morris & Company, the Fairbank Canning Company, then, as it is now, an integral part of the Morris firm, stuffed its first can, and pasted it with the well-known "Lion," as a guarantee of quality to the world. From that time to the present the firm has grown rapidly. Repeated additions have been made to the Chicago plant, and in addition packing houses have been opened at East St. Louis, St. Joseph and Kansas City. The combined buildings at these four points cover a floor space exceeding 150 acres. The Chicago house alone is so large that were a man to walk through it, opening each door that he came to, without entering a single room except to pass through, or stopping to examine anything, it would take him a full working day of ten hours, and something over, to do it.

The development of the packing industry has been, probably, the most significant thing connected with the rapid growth of Chicago. It is the only industry which is distinctly American, and with the probable exception of the steel industry, it is the largest of all that America has either originated or adopted from other countries.

The existence of the packing industry as it is to-day is almost entirely due to the work of four men, Nelson Morris, Philip D. Armour, Gustavus F. Swift and G. H. Hammond. Of these four, the pioneer, and the only survivor, is Mr. Nelson Morris.

Since Mr. Nelson Morris first began business at Thirty-first street and the Lake Shore, the butcher business has developed into the packing business, that is to say, an industry conducted for the production of one product has developed into an industry in which sixty-nine businesses are conducted, and in which the main product is sold at a loss. This main product is the same product the butcher business was conducted to produce. This metamorphosis has been due more, than to any other living man, to Mr. Nelson Morris.

When the firm of Nelson Morris & Company was established, in 1879, the butcher business had grown into an embryonic packing business, that is to say, that although the chief product was still fresh meat, and although the chief profit was still made out of fresh meat, yet a commencement had been made in the salvation of the bye-products, which has since revolutionized the entire industry.

The packing house Mr. Morris opened June 17, 1879, consisted of four departments: the Fresh Meat Department, the Hide Department, the Oleo Department and the Canning Department. The packing house he runs to-day consists of sixty-nine departments, each one of which has been made necessary by the changed conditions surrounding the slaughtering and sale of animal food products.

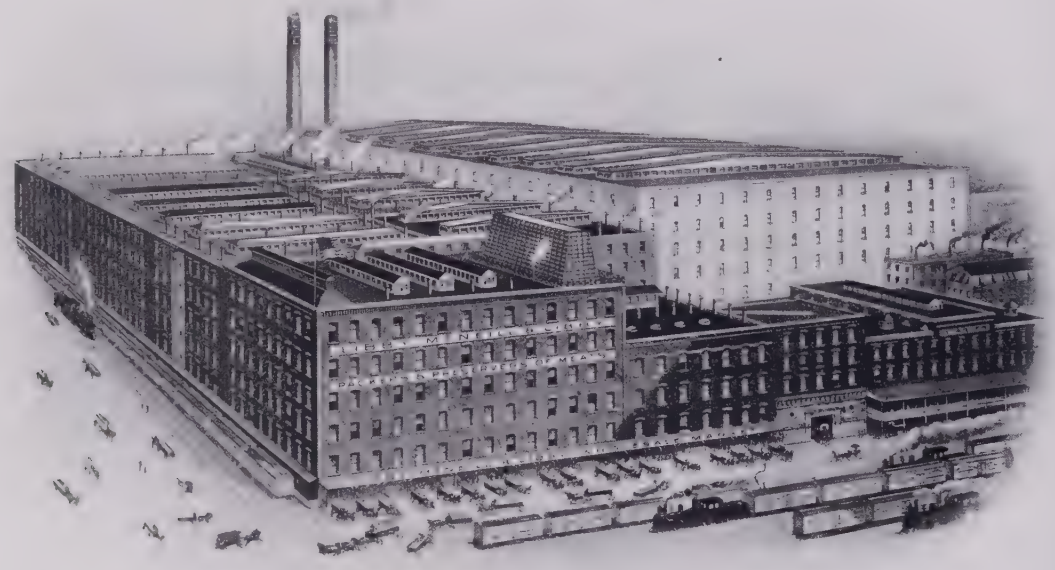
In these sixty-nine departments are included the preparation of all kinds of food products, from fresh meats to mince meat and plum pudding. Butter, eggs and poultry, glue, tin cans, electric light, feathers, hide, ice, fertilizer and a score of other products are made.

OLD MYRICK STOCK YARDS.
Photo of Painting in possession of Nelson Morris, Esq.

A hospital, fire brigade, printing shop, lithographing establishment, laundry, barber shop, architects' office and a dozen other enterprises are parts of the great and complex organization of Morris & Company's establishment.

Mr. Morris has always insisted that his packing houses should be constructed scientifically and along as completely modern lines as possible. His Chicago house, when it was erected, was the model house of the country and is still held by packing house authorities to be superior to any of its contemporaries.

The East St. Louis house was built in June, 1889, and was again a model. Nine years later the packing house at St. Joseph began operations and was in its turn held up to the packers of the country as an example of what a packing house should be. All three houses were, however, eclipsed when, in 1905, Morris & Company opened their plant at Kansas City, which they had erected at a cost of $2,225,000, after having saved $375,000 by doing all their construction work, from cellar to garret, through their own construction department.



VIEW OF LIBBY, McNEILL & LIBBY'S PLANT.

Libby, McNeill & Libby, whose name has long been a household word in all parts of the civilized world, has been made famous by the uniformly excellent meats bearing this brand, sold in all markets of the world for almost a third of a century. There is scarcely a man, woman or child under the sun who has not, at some time or other, eaten some of Libby's delicious table specialties prepared by this company. Any facts relating to Libby, McNeill & Libby cannot, therefore, fail to be of interest. This concern is distinctively a Chicago institution, a striking example of what Chicago push and energy, coupled with brain and strict business integrity, can accomplish, and one in which much pride is felt by the citizens of Chicago.

Prior to the year 1867 the curing of beef was done exclusively in cold weather, but in the summer of 1867 Mr. Arthur A. Libby demonstrated the practicability of curing beef in the summer, and early in the following year the business of Libby, McNeill & Libby was founded by Messrs. Arthur A. Libby, Archibald McNeill and Charles P. Libby. Arthur A. and C. P. Libby, brothers, hailed from Portland, Maine, and Mr. McNeill from Buffalo, New York. They became the pioneers in the great meat-canning industry of to-day. Their capital, as Mr. Arthur A. Libby once expressed it, consisted of but little cash, three pairs of strong and willing hands, and an indomitable determination to succeed. The name of the firm was first A. A. Libby & Company, which was subsequently changed to its present style. For many years the business was confined almost exclusively to the packing and preserving of beef, but during the last few years pork, mutton, veal, poultry, pickles, olives, etc., have been added. The average number of carcasses of beef handled daily during the first year was only about 4.63. The second year showed a material increase over the first, and so did each succeeding year over its predecessors, until now the capacity

has been increased to 3,000 head of cattle per day, exclusive of the other lines.

When the business was incorporated, Mr. A. A. Libby was elected president; Mr. C. P. Libby, vice-president and manager; Mr. A. Libby, Jr., treasurer, and Mr. L. C. Young, secretary. At the present time officers are as follows: Edward Tilden, president and treasurer; Edward F. Swift, vice-president; W. F. Burrows, vice-president and secretary; C. T. Lee, assistant secretary; Henry W. Hardy, assistant treasurer.

The National Packing Company was incorporated under the laws of New Jersey, March 18, 1903, in order to acquire a number of the smaller packing houses bought up by the stockyards interests prior to this time. The capital stock of the company, authorized and outstanding, is $15,000,000. The plants acquired by the National Company, which had been purchased before the organization by the leading stockholders in their individual capacity, are the G. H. Hammond Company, Hammond Packing Company, Omaha Packing Company, the Anglo-American Provision Company, the Fowler Packing Company, St. Louis Dressed Beef & Provision Company, United Dressed Beef Company, Fowler's Canadian Company, Limited; Fowler Bros., Limited, Liverpool; and the Continental Packing Company. The officers of the National Packing Company are: Edward Tilden, president; Arthur Colby, secretary and assistant treasurer. The directors are: J. Ogden Armour, P. A. Valentine, Louis F. Swift, Edward F. Swift, Edward Morris, Ira N. Morris, J. P. Lyman, T. J. Connors, Edward Tilden, Thomas E. Wilson, Arthur Meeker, L. A. Carton, Kenneth K. McLaren, Charles H. Swift, L. H. Heyman, S. McRoberts and F. A. Fowler.

S. A. McClean, Jr., late president of the National Packing Company, which comprises a number of large packing firms in America and Canada, was without a doubt the most widely known and well-liked member of the packing trade. His sudden death the morning of August 29, 1905, was a shock to his many friends and business associates. He was telephoning from his home to his office when he was stricken with heart disease, and a few moments later the word was flashed over the ticker to the La Salle street financial houses that he was dead.

Combining a most happy faculty of winning even his opponents over to his way of thinking, with a strong personal magnetism and a jovial and kind disposition, he advanced steadily from the position of office boy, until, at the age of thirty-five years, he was directing the complex machinery of one of the largest packing plants in the world.

Mr. McClean was born at Belfast, Ireland, February 11, 1870, and entered the employment of the Anglo-American Provision Company, twenty-five years ago as office boy. By sheer will power and great perseverance, never being satisfied until he had accomplished what he set out to do, no matter how small, he climbed the ladder until at the exceptionally young age of twenty-five years, the position of vice-president of the Anglo-American Provision Company was offered him. His success in this position being such as to bring him conspicuously to the foreground as a commanding factor, S. A. McClean was elected vice-president of the National Packing Company very shortly after the formation of the latter company, and in this capacity proved himself more than equal to the task. Illustrating his superior ability as the executive head of an institution having extensive interests throughout the

S. A. McCLEAN, JR.

world, quick in forming correct deductions and deciding most important questions on the spur of the moment, he had at the time of his sudden death reached the pinnacle of success, occupying the president's chair with the National Packing Company. He was a man without an enemy, esteemed even by his adversaries for his sterling qualities and honest dealings.

S. A. McClean was a member of the Chicago Athletic Association, Union League, Chicago, Mid-day and Washington Park clubs, as well as director of several other large corporations and banks. The title given him by his friends, "the Little Napoleon of the Packing Business," was certainly well chosen.

Schwarzschild & Sulzberger Company. The year 1853 saw the beginning of the history of the Schwarzschild & Sulzberger Company of to-day, and which has covered a successful business period of

fifty years. On the date above mentioned the slaughtering of fifty cattle weekly was considered a large business, and compared to the present output of about fifteen thousand (15,000) cattle per week, together with the handling of thousands of sheep, lambs and hogs, shows the progress and growth of the company. Schwarzschild & Sulzberger Company, more familiarly known as the "S. & S." Company, may be truly classed as one of the pioneers in the handling of refrigerated dressed beef, and are now conceded to be one of the packing powers of the world, which is due, in a great measure, to the high standard of its goods and strict business principles.

During its early history the business was carried on as a firm, of which the partners were Mr. Joseph

FERDINAND SULZBERGER.

Schwarzschild and Mr. Ferdinand Sulzberger, the latter being president and treasurer of the present corporation. It early demonstrated itself to the firm that in connection with the slaughtering of cattle, the success of an abattoir business depends largely on the most advantageous handling and utilizing of the by-products, particularly the fats, which had been given little and careless attention by the old-time slaughterers. The adoption of new machinery and ideas, backed by the energy and experience of the firm, resulted in placing on the market the famous "Harrison Brand" of Oleo oil, which soon found favor on the domestic and European markets, and is to-day conceded to be the leading brand, with a world-famed demand and reputation.

In 1885, owing to the practical retirement of Mr. Schwarzschild from active business, his son-in-law, Mr. Frederick Joseph, who had previously been a handler of live stock, became associated with the firm, assuming Mr. Schwarzschild's active duties, and on the incorporation of the Schwarzschild & Sulzberger Company later, was elected vice-president, which office he holds at the present time.

In 1888, on account of increased European business, Mr. Sulzberger went abroad for the general promoting of their foreign interests. It was at this time that Mr. Samuel Weil became associated with the firm, and, with Mr. Joseph, ably assisted in handling the business. Mr. Weil's energy and business abilities made him an important factor in the Schwarzschild & Sulzberger Company. Upon the incorporation of the company, he was elected vice-president and secretary, which offices he holds to-day.

In 1892, the rapid increase of domestic and export business having outgrown the capacity of the New York plant, the firm saw the advantages of an additional plant in the West, and negotiated the purchase of a corporation, at that time known as the Phœnix Packing Company, having a plant located at Kansas City, Kansas, with a few distributing branches in the East, and a refrigerator car line, known as the Cold Blast Transportation Company. Enlargement of the plant to several times its original capacity, with added modern machinery and facilities, immediately followed.

After purchasing the western interests, the New York plant gradually increased the output of kosher killed cattle for the supply of Greater New York, as an equivalent for volume transferred to Kansas City for export and general branch distribution.

On May 10, 1893, there was filed with the secretary of state in Albany, New York, a charter of incorporation, known as the Schwarzschild & Sulzberger Company, which is the corporation of to-day.

Branch houses were rapidly established throughout the country and the export business was materially increased.

The Schwarzschild & Sulzberger Company's success and growth again demonstrated the further enlargement of plant requirements, and in 1899 it was decided to build their famous Chicago plant, conceded to be the finest in the world, which, with that at Kansas City, gave the company the advantage of being located on two of the leading cattle markets of the country—Kansas City and Chicago.

With modern plants, an increased refrigerator car line, and a complete equipment of livestock cars for transporting their cattle to New York, it put them in an advantageous position—second to none—to compete for the general business of this country and Europe.

In 1900, Mr. M. J. Sulzberger, son of President Sulzberger, was elected vice-president, and upon completion

of the Chicago plant, assumed general charge as resident official at Chicago.

The volume and magnitude of the Schwarzschild & Sulzberger Company's business, backed by the high standard and reputation of its products, and with the enormous army of employees, aggregating twelve thousand, including auditors, inspectors, department superintendents, managers and general employees of the best talent, also its own architects and a construction department for the building and maintaining of its plants, branches, car lines, etc., gives this company an enviable standing in the packing interests of the world. Approximately, the aggregate domestic and European business for 1905 will aggregate $100,000,000.

has been built up in a little over twenty years, by the perseverance and energy of the man at the head, is now $250,000.

Mr. Miller was born in Chicago, March 15, 1857. He was educated in the public schools, graduating from high school in Blue Island. The first two years of his business life were spent in the employ of a stationery firm. In 1876 he began his career in the packing business as office boy with Fowler Bros., at the Union Stock Yards. He rose from this position to assistant shipping clerk and soon after was made shipping clerk. Then he was sent by his employers to the Board of Trade to buy cooperage and salt.

With this experience, in 1882, Mr. Miller, then twenty-five years old, went in business for himself, be-

MILLER & HART'S PLANT.

The Chicago plant covers eighteen acres, and is connected with the Union Stock Yards by overhead viaduct. It has a capacity per week of 10,000 cattle, 25,000 hogs, 15,000 small stock. There are cellars, outbuildings, a canning plant and an oil refinery. The motive power is electricity and it has a large artificial refrigeration plant.

It is visited yearly by thousands of people who marvel at the uniqueness of this modern institution.

Walter H. Miller, president of the packing house of Miller & Hart, typifies the Chicagoan whose business reflects the personality of its founder and owner. In 1876 Mr. Miller was an office boy. Now he is directing a great concern employing hundreds of people. In 1882, when Mr. Miller embarked in business for himself as a provision dealer, his capital was less than $2,000. The capital of the packing house which

coming a provision dealer on South Water street. Two years later he combined his resources with those of William Craig. The provision house of Miller, Craig & Co. was founded with a capital of $2,500. In 1890 the firm name was changed to Miller & Hart. After the death of Mr. Hart, which occurred in 1897, the business was incorporated.

Two years previous to this the company moved into the plant it now occupies at Twenty-fifth street and La Salle avenue. This plant covers an area of several acres. There is a frontage of 300 feet on La Salle avenue and at the rear of the plant are the tracks of the Chicago, Rock Island & Pacific Railway. A side-track from the railway runs directly into the yards of the packing company. From here the Miller & Hart products are sent to all parts of the continent.

The Miller & Hart Company have always been

entirely independent of other packing houses at the Union Stock Yards. The "Berkshire" brand of ham, which is the Miller & Hart Company's special product, has become widely known throughout the country.

Associated with Mr. Miller in directing the packing company is D. C. Roberton, who has been with the concern seventeen years. He is now assistant manager. D. V. Colbert, who is secretary of the company, is an influential member of the Ways and Means Committee of the Chicago Commercial Association. John Roberts, vice-president of the company, is also a member of the packing firm of Roberts & Oake at the Union Stock Yards. The treasurer, C. A. Bruce, was formerly credit man for a large wholesale grocery house at Bloomington, Illinois. Twenty-five traveling salesmen have made the Miller & Hart products known and used from coast to coast.

In 1879 Mr. Miller was married to Rowena P. Fobes of Chicago. They have two children, Walter F., twenty-three years old, who is an architect, and Charlotte, who is now Mrs. Arthur R. McDougall. The Millers live at 4580 Oakenwald avenue. Mr. Miller, who has for many years been prominent in Masonic circles, is a Knight Templar and member of the Medinah Temple, Mystic Shrine. He is also a member of the Chicago Athletic Club.

M. H. Tichenor & Company, the well-known firm of horse dealers, was established in 1893. The firm consists of M. H. Tichenor and L. M. Newgass. Mr. Tichenor was engaged in the horse business eight or ten years previous.

Tichenor & Company have always advocated the "American Trotter" as the best type for a high-class coach or carriage horse. It has always been the aim of this firm to handle only high-class horses; they have furnished more first prize winners at the principal horse shows than all of the dealers of the United States combined, which certainly proves the quality of the horses they sell.

The firm has two stables in Chicago, one at Forty-third and Halsted streets, adjoining the Dexter pavilion, and the other at Fifty-ninth and Paulina streets. The former is the finest appointed sales stable in the stock-yards. It has a capacity of eighty-five head, and is fitted with every convenience. The training barn is the most up-to-date in America, with box stalls for over 100 horses, and a beautiful park for exercising and training their horses.

LAKE VIEWS IN DOUGLAS PARK.

CHAPTER XXII.

CHICAGO'S MANUFACTURING INTERESTS.

HICAGO'S growth and greatness can be best measured by the story of the city's manufacturers. Favored by location and the accessibility of cheap fuel, iron, lumber, clay, sand and other raw materials for a score or more of the most important industries, Chicago has become the manufacturing wonder of the world. During the past twenty-five years the forward strides of the city's factories have outstripped all precedents. The gains made during this last quarter century have been so marvelous as to arouse the envy and wonder of all other centers of industry. Coupled with Chicago's nearness to the unmeasured natural products of the Middle West, has been the cheapness of land and its natural and inevitably advantageous location, as the main gateway for the transcontinental traffic of the country.

Nowhere in the world has such a record been made in the number and diversity of manufacturing interests, in the great capital invested, in the annual output and in the hundreds of thousands of men and women employed. The congestion of traffic in the streets, the crowded side-walks of the down-town districts, the street cars, carriages, trucks and motors, the disarray of busy streets, the worn out pavements, the dirt, the grime, the very smoke which gives Chicago its reputation as an unclean city, are all evidences of a manufacturing growth without parallel. In the terrific pace set by Chicago's manufacturing interests, the municipality has been well-nigh overwhelmed in dealing with the questions of public utility, convenience and safety. But at the same time the great manufacturing interests have always stood for all that is best in Chicago's public spirit, civic pride and municipal advancement. To the great wealth developed by these industries is due every movement for the beautification of the city, for better streets, better traffic facilities, better schools, greater parks and purer civil government. Already the city is surrounded by a cordon of manufacturing centers to which many of the larger industries have been forced to move. There are being built the most modern plants. Industrial communities are being started that have drawn thousands from the crowded and unsanitary sections of the city. In this way the inevitable congestion of the down-town streets and the terminals of the railroads is being relieved, the border expansion being but the natural consequence of the tremendous industrial strides of the city.

Chicago's greatest industrial development may be said to have set in about the year 1880. There was invested in manufacturing in Chicago at that time upwards of $68,800,000. At the close of the year 1900 this investment had grown almost nine-fold, the aggregate being over $534,000,000. This increase of nearly $450,000,000 in twenty years has never been equaled. The total sum now invested in the manufacturing interests of the city will approximate $650,000,000, showing a continued advance for the last five years of approximately twenty per cent. From 1890 to 1900 the percentage of increase was forty-eight, and everything points to a larger increase during the present decade. The output of these great industries now aggregates over one billion dollars. In 1880, Chicago's factories produced only $248,995,000, rising to $880,945,000 in 1900, and by the latest estimates has well passed the billion mark. New York and Pittsburg, although their gains have been tremendous in the same decade, can show no such advance.

Chicago's manufacturers, twenty-five years ago, employed less than 80,000 wage earners. Its factories

now give employment to over 300,000 and the wages paid twenty-five years ago have increased from, approximately $35,000,000 to nearly $175,000,000. In the last quarter century Chicago's manufacturing interests have passed all American rivals, except New York. This supremacy has not only been attained in the value of the total output, but in the capital invested, the number and size of the plants, the number of wage earners and wages paid and in the cost of the raw material used. Chicago's manufacturing energies show no disposition to go back or even to remain stationary. The growth continues strong and vigorous.

Despite the great combination in industrial enterprises, Chicago's increase shows a larger proportion of smaller factories than in enterprises involving a million dollars or over. Combinations have had no diminishing effect upon the total capital invested in Chicago's industries nor in the number of employees and the wages paid them, nor in the aggregate of the output or the value of the products. To-day the scale of wages paid in the factories of Chicago is higher than ever before. The length of the working day is less than it was ten years ago. In increasing the capacity of their plants Chicago manufacturers have looked into the future, and while the comparison of the capital invested is relatively small, still the volume of business done is growing by such leaps and bounds that whatever has been sacrificed in percentage of profits is being more than made up by the increase in volume of business done in practically all lines.

Chicago represents not less than two-thirds of the manufacturing potentiality of the entire state of Illinois. The factories of the city and the suburbs and the towns, practically a part of Chicago, are increasing in number and in the value of their output, at a rate greater than all the rest of the state combined. This is in a measure largely due to the convenience of transportation facilities, the ability to secure power without a large investment for a motive plant and the general accessibility to the market. Some of the larger institutions, in order to avoid the annoyance of labor troubles and the great investment in realty have gone to country towns, but this had no appreciable effect on the city's steady, onward growth. The effect, however, has been to give the country outside of Chicago an increase in the number of wage earners. The increase in the number of factory workers in Chicago, during the last fifteen years has been somewhat over fifty per cent. For the rest of the state the increase has been over sixty per cent. This same rate of increase holds good throughout the state as to the total wages paid and the value of products. As many of the industries have gone to nearby towns, their advantages and increases can all be justly recorded as part of Chicago's tremendous industrial growth.

The Republic Iron & Steel Company was incorporated May 3, 1899, under the laws of the state of New Jersey, with a capital stock of $55,000,000. A large number of the most prominent steel companies in the country were consolidated under one management. The principal products of the company are pig iron, bar iron and steel, splice bars, steel billets, steel rails, bolts, nuts, screws, car axles, harrow teeth, T-rails, agricultural shapes, etc. The annual capacity of the plants exceeds 1,000,000 tons of finished iron and steel, and 600,000 tons of pig iron.

The capital stock authorized $25,000,000 7 per cent cumulative preferred and $30,000,000 common, each of the par value of $100 per share; $20,852,000 of the preferred and $27,352,000 of the common stocks are issued and outstanding, of which the company holds in its treasury $435,100 of the preferred and $161,000 of the common stock. The preferred stockholders are entitled to priority as to assets and dividends.

Dividends on preferred 7 per cent per annum payable quarterly, were paid regularly from October 1, 1899, to October 1, 1903. None since. The fiscal year ends June 30. The registrar of stock is the Chase National Bank, New York, and the stock transfer office is the City Trust Company, New York. The stock transfer books close about twenty days before the date of the annual meeting, and fifteen days before the date of the payment of the annual dividends. The annual meeting is the third Wednesday in October at Jersey City. The bonds consist of $10,000,000 of thirty-year 5 per cent gold mortgage bonds payable in 1934.

The company operates the following properties:

Ore Properties—Cambria Mine, Lillie Mine, Marquette Range, Negaunee, Michigan; Wills Mine, McKinley, Minnesota; Franklin Mine, Bessemer Mine, Victoria Mine, Pettit Mine, Kinney Mine, Missabe Range, Fay Mine, Virginia, Minnesota; Mahoning Ore & Steel Co. (three-fiftieths interest), Hibbing, Minnesota; Union Ore Company (one-half interest), Virginia, Minnesota; Antoine Ore Company (one-half interest), Iron Mountain, Michigan; Brown & Red Hematic Ore Mines, near Birmingham, Alabama.

Coke Properties—Connellsville Coke Works, Atcheson, Pennsylvania; Pioneer Coke Ovens, Thomas, Alabama; Warner Coke Ovens, Birmingham, Alabama District; Woodside Coking Coal Lands (Connellsville District) Nicholson, Pennsylvania.

Coal Properties—Washington County Steam Coal Lands, Clokeyville, Pennsylvania; Springfield Mine (Wilmington & Springfield Coal Company), Springfield, Illinois; Sayreton Mine, Warner Mine, Thompson Mine, on Pioneer property near Birmingham, Alabama.

Limestone Properties—Croton Limestone & Brick Company (interest), New Castle, Pennsylvania; Dale

Limestone Works (on Pioneer property) near Birmingham, Alabama; Union Limestone Company (interest), Lowellville, Ohio; Lake Erie Limestone Company, Carbon, Pennsylvania.

Blast Furnaces—Pioneer, No. 1, Pioneer, No. 2, Pioneer, No. 3, Thomas, Alabama; Atlantic, New Castle, Pennsylvania; Hannah, Haselton, Youngstown, Ohio; Hall, Sharon, Pennsylvania.

Steel Plants—Bessemer Steel Plant, Bessemer Steel Rail Mill, Youngstown, Ohio; Birmingham Open Hearth Steel Plant, Birmingham, Alabama.

Railroads and Docks—Springfield & Northern Railroad, Springfield, Illinois; Thomas & Sayreton Railway and other Industrial Railways in Birmingham District, Sharon Connecting Railroad, Sharon, Pennsylvania; Madison County Belt Railroad, Alexandria, Indiana; Mahoning & Shenango Dock (two-ninths interest), Ashtabula, Ohio; Union Dock Company (one-ninth interest), Ashtabula, Ohio.

Rolling Mills—Alexandria Works, Alexandria, Indiana; Alabama Works, Birmingham, Alabama; Andrews Works, Youngstown, Ohio; Atlantic Works, New Castle, Pennsylvania; Birmingham Rolling Mill Works, Birmingham, Alabama; Brown-Bonnell Works, Youngstown, Ohio; Central Works, Brazil, Indiana; Corns Works, Massillon, Ohio; Eagle Works, Ironton, Ohio; Indiana Works, Muncie, Indiana; Inland Works, East Chicago, Indiana; Mahoning Valley Works, Youngstown, Ohio; Muncie Works, Muncie, Indiana; Mitchell-Tranter Works, Covington, Kentucky; Sharon Works, Sharon, Pennsylvania; Sylvan Works, Moline, Illinois; Springfield Works, Springfield, Illinois; Toledo Works, Toledo, Ohio; Tudor Works, East St. Louis, Illinois; Terre Haute Works, Terre Haute, Indiana; Wabash Works, Terre Haute, Indiana.

These properties include valuable iron and coal mines, and coal and limestone lands in Pennsylvania, Alabama, Michigan, Illinois and Minnesota, chief among them being the Pioneer properties at Birmingham, Alabama, which comprises 26,000 acres, of which 14,000 acres are underlaid with coal of excellent quality, suitable for coking and general steam purposes, and 10,000 acres, rich in brown and red ores; the Franklin group and the Pettit and Kinney Mines on the Missabe Range; Cambria and Lillie Mines on the Marquette Range, an interest in the Mahoning Ore & Steel Company, and a half interest in the Union Ore Company, and Antoine Ore Company (all being well-known iron properties); also some 800 acres of coking coal lands in the Connellsville District, 2,000 acres of steam coal lands in Washington County, Pennsylvania, and 200 acres steam coal lands in Illinois.

The officers of this company are as follows: President, Alexis W. Thompson; Chairman Executive Committee, G. Watson French; Vice-Presidents: Archibald W. Houston, J. F. Taylor, W. H. Hassinger, George A. Baird, Edwin N. Ohl; Treasurer, John F. Taylor; Secretary and General Auditor, H. L. Rownd; Assistant Secretary, Charles E. Graves; General Counsel, Harry Rubens; Solicitor, R. Jones, Jr.; General Sales Agent, Geo. A. Baird; Assistant General Sales Agent, R. P. Zint; Purchasing Agent, W. L. Lee; Traffic Manager, H. R. Moore. Directors: Archibald W. Houston, L. C. Hanna, Geo. A. Baird, G. Watson French, Alexis W. Thompson, Harry Rubens, Chas. H. Wacker, John F. Taylor, George R. Sheldon, William H. Hassinger, Grant B. Schley, John Crerar, Jno. W. Gates, Chas. S. Guthrie. Executive Committee: G. Watson French, Chairman; Alexis W. Thompson, John F. Taylor, Harry Rubens, George A. Baird, Chas. H. Wacker.

The main office is in the First National Bank building, Chicago, Illinois. The New York office is at 111 Broadway.

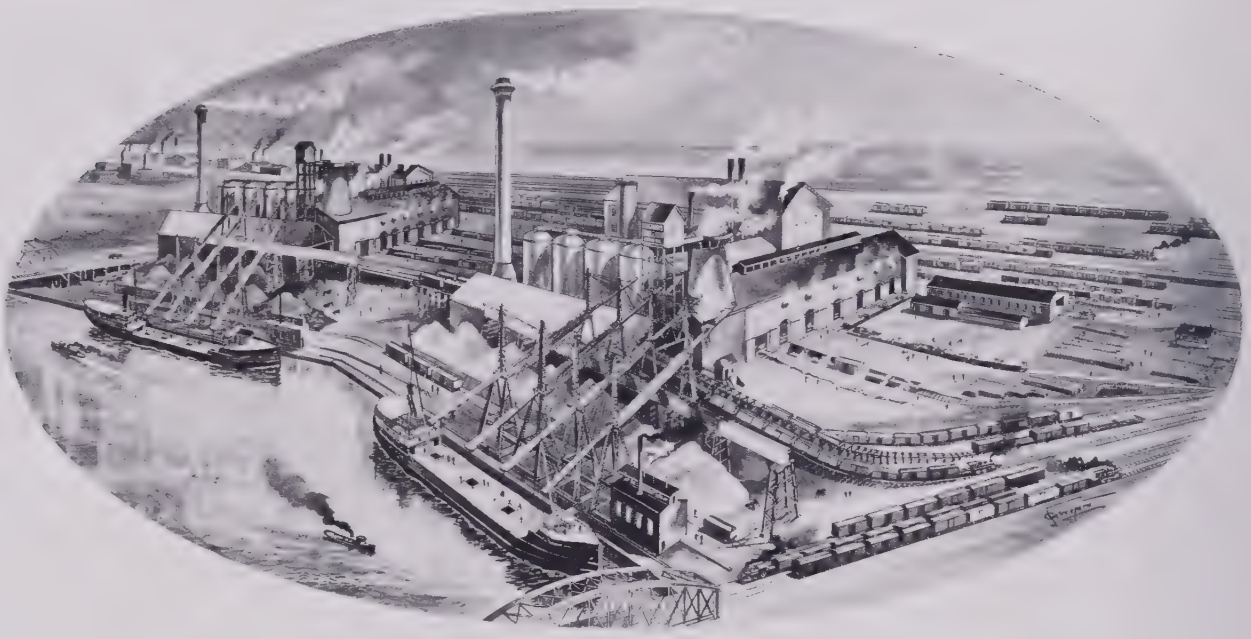
The Iroquois Iron Company, one of the largest plants of its kind in the Middle West, is located on the Calumet river, and extends from Ninety-fifth street to the railroad bridge, over which run the trains

M. C. ARMOUR.

of the Baltimore & Ohio, the Fort Wayne and the Lake Shore roads. The plant's shipping facilities are excellent; aside from the proximity of the railroads, their ore docks lie along the Calumet river, which accommodates the deepest draft vessels which transport ore from the Lake Superior regions. The annual capacity of the company's furnaces, which give employment to over 500 men, is 200,000 tons of foundry and malleable pig iron, all of which products are made from

Lake Superior and Old Range ores. Their coke for fuel is brought in trainload lots from the Stonega and Connellsville districts.

The officers of the Iroquois Iron Company are M. Cochrane Armour, president; William A. Rogers, vice-president; George A. Tripp, secretary and treasurer,



VIEW OF IROQUOIS IRON COMPANY'S PLANT.

and Samuel A. Kennedy, superintendent. Mr. Armour, who is likewise associated with Rogers, Brown & Co., sales agent for the Iroquois Company, is a native of Auburn, New York, where he was born in 1851, of Scotch parents. He received his education in Michigan and Wisconsin high schools, and came to Chicago in 1876. He was connected with the Adams & Westlake Company of this city for ten years, and in 1890 he helped organize the firm of Rogers, Brown & Co. In 1899 he was elected president of the Iroquois Iron Company, which position he has since held. He is also vice-president of the Rogers Iron Mining Company.

The Scherzer Rolling Lift Bridge is the invention of the late William Scherzer, C. E. It fulfills every requirement of a movable bridge, eliminating, in so doing, all the objectionable features of a swing bridge and spanning navigable waters in the simplest and least expensive manner. The efficiency of this type of bridge for the accommodation of heavy land and water traffic, and its many points of superiority over a swing bridge, have been demonstrated by more than seventy large Scherzer Rolling Lift Bridges constructed during the past ten years and in successful operation for the principal railroad companies and municipal corporations in the United States and abroad.

The chief advantage of Scherzer Rolling Lift Bridges over the old-fashioned center-pier swing bridges is the absence of any center-pier and large obstructive pier protection. The supports for the Scherzer Rolling Lift Bridge are supplied by piers placed upon the sides of the navigable channel, and upon these the movable parts of the bridge roll in a vertical direction, and through the clear opening thus obtained vessels are enabled to pass rapidly. A partial opening of the bridge will usually suffice. The power expended and the time occupied in opening and closing the bridge are both reduced to a minimum. The large bridges of this type now in use are usually opened or closed in thirty seconds, and receive highway or railroad traffic in less than one minute from the time the bridge begins to close. Another important advantage of this type of bridge consists in the absolute protection which the bridge itself affords against accidents when opened. In the open position the bridge itself forms a positive signal and barrier, absolutely preventing vehicles and pedestrians from falling into the water, which accidents are very frequent with swing bridges and result in large losses of life.

The first bridge of the Scherzer type was constructed across the Chicago River at Van Buren street. It was completed in the spring of 1895, and has been used continuously by the city of Chicago for the heaviest highway traffic, and is now carrying both highway and electric car traffic and giving complete satisfaction.

The four-track railroad bridge of the Scherzer type conveying the Metropolitan West Side Elevated Railway Company's lines across the Chicago River midway between Jackson and Van Buren streets was completed

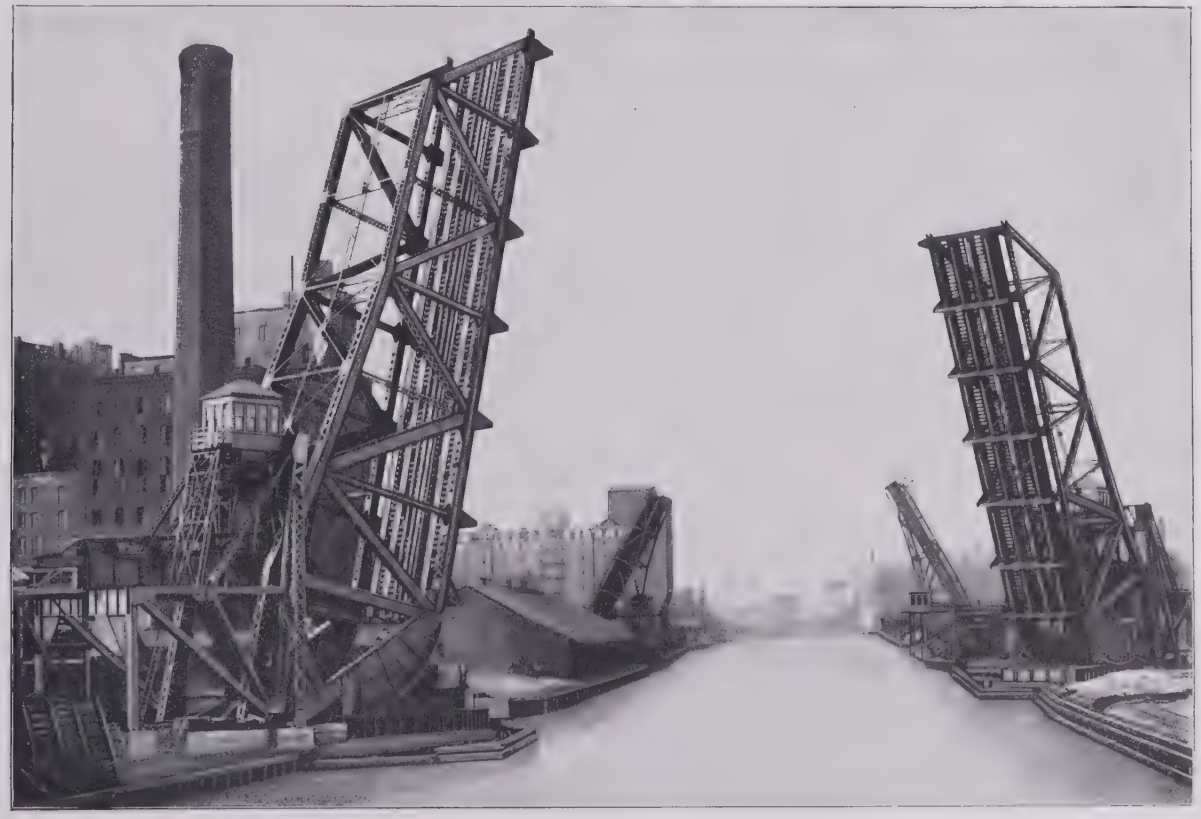
very soon after the Van Buren street bridge. It is composed of two similar or duplicate bridges placed side by side and firmly coupled together so as to operate as one bridge, or when desired may be uncoupled in a few minutes and operate separately, thus insuring a crossing for trains at all times. This bridge is operated by electricity and is opened or closed within thirty seconds. The satisfaction which this bridge has given can be no better shown than by an extract from a letter to Mr. Scherzer, written by Mr. W. E. Baker, general manager of the Metropolitan West Side Elevated Railway Company, under date of July 12, 1897, in which he says, referring to this subject:

"It was completed some time before May 6, 1895, at which date the road was opened and the bridge placed in active service, since which time it has operated continuously, and of itself caused no delays to trains, of which there are and have been, since shortly after the date of opening the road, about 1,200 daily crossings the bridge. We do not make any charge for motive power for operating the bridge; it is too small to be considered. The bridge is operated, as you know, by motors, using the current with which we operate the trains. The bridge has proved rigid. It is rapid to open and shut, has never shown any signs of failure; it requires little power to move it and shows no evidence of a depreciation, and we are satisfied with it."

The North Halsted street bridge of the Scherzer type was completed in 1897.

The State street bridge of the Scherzer type was completed in 1903. It replaced a very obstructive center-pier swing bridge, through which modern vessels could not pass. The new bridge gives a clear channel for navigation 140 feet wide. It was constructed by the Sanitary District of Chicago in connection with similar bridges at Randolph street, Harrison street, Eighteenth street and other points on the Chicago River where obstructive center-pier swing bridges had to be removed in order to secure an unobstructed water flow and passage for vessels.

Firmness and rigidity under heavy loads is a marked feature of the Scherzer Bridge, and is due to a great extent to the simplicity of the bridge structure as compared with other movable bridges now in use. This is at once apparent upon inspection of the bridge itself or the views herewith presented. Whether compared with the best class of swing bridges now in use, with the direct lift bridge, of which that at South Halsted street is an example, or with the various plans of experimental structures intending to do away with the center-



SCHERZER ROLLING LIFT BRIDGE

Across the Chicago River at Entrance to Grand Central Station, Chicago. The Longest Span Bascule Bridge in the World.

pier, the Scherzer Bridge has no equal for simplicity, rigidity, safety, rapidity of operation, economy, efficiency or durability. This is demonstrated by the fact that the principal railroad companies are rapidly removing their center-pier swing bridges and replacing them with modern Scherzer Rolling Lift Bridges.

The New York, New Haven & Hartford Railroad Company constructed a six-track Scherzer Bridge across Fort Point Channel at the entrance to the South Terminal Station, Boston, Massachusetts, in 1899. This station is one of the largest and most important terminal stations in the world. The Scherzer Bridge was selected by the railroad company because it fulfilled the highest requirements of a movable bridge. It has been so satisfactory that the railroad company removed its double-track swing bridge at Bridgeport, Connecticut, and replaced it with a Scherzer Bridge, completed in 1903. Four-track Scherzer Bridges are now under construction for this company at Cos Cob, Westport, over the Housatonic River and over the Connecticut River, Connecticut; also at Neponset, Massachusetts, and six-track bridges across the Bronx and Hutchinson rivers, New York. All of these modern bridges take the place of discarded center-pier swing bridges. They are intended to accommodate and expedite the increasing traffic of the railroad company and to facilitate the improvement from steam to electric operation of trains.

SCHERZER ROLLING LIFT BRIDGE

Across the Chicago River at State street, Chicago. Invented by William Scherzer, C. E.

Seven Scherzer Rolling Lift Bridges have already been constructed for Greater New York; four at Boston, Massachusetts; five at Cleveland, Ohio, and other cities too numerous to mention here.

One of the illustrations herewith shows the double-track railroad Scherzer Rolling Lift Bridge constructed across the Chicago River at the entrance to the Grand Central Station, Chicago. This bridge is the longest span bascule bridge in the world. It is also opened

more frequently than any other bridge in the world. It has given perfect satisfaction to the railroad company.

The Scherzer Rolling Lift Bridge Company also has the distinction of having made the designs and plans for and constructed the eight-track railroad bridge across the Drainage and Ship Canal, Chicago. This bridge is used by the Pittsburg, Cincinnati, Chicago & St. Louis Railway, the Chicago Terminal Traction Railway, the Chicago Junction Railway, and the Baltimore & Ohio Railway. It is the largest movable railroad bridge in the world and consists of four double-track bridges of the Scherzer type placed side by side to be operated either jointly or separately, as desired.

In England a large Scherzer Bridge has already been completed for the South Eastern & Chatham Railway, near London. Others are under construction in Ireland, the north of England, Russia and Holland, where the Scherzer type of bridge is superseding and replacing the trunnion type of bascule bridge.

A distinguished authority has stated: "The Scherzer type is the bridge of perfection. It is recognized by the engineering profession as the most perfect bascule bridge in existence. It is a monument to the inventor." This statement is verified by the fact that all of the largest and most important movable bridges constructed during the past ten years have been bridges of the Scherzer type.

William Scherzer, the inventor and patentee of the Scherzer Rolling Lift Bridges, was born at Peru, La Salle County, Illinois, on January 27, 1858. His parents were William and Wilhelmina Scherzer. His early education was acquired in the public schools of Peru, Illinois. At the age of fifteen he was placed in charge of a private tutor with a view of preparing him for entrance to some European University. At the age of eighteen he entered the Polytechnicum at Zurich, Switzerland, to take the four years in civil engineering. He was graduated with honors in the year 1880. Upon his return to the United States William Scherzer was engaged as engineer with the Matthiessen & Hegeler Zinc Company, remaining with that company for three years. For the following eight years he was employed with the Pittsburg, Fort Wayne & Chicago Railway Company, the Keystone Bridge Company and the Carnegie Steel Company, leaving the latter company to establish an office as consulting engineer.

One of the problems upon which he was consulted was the question of a movable bridge to carry the four tracks of the Metropolitan West Side Elevated Railway across the Chicago River, to the business center of Chicago, between the Jackson street and Van Buren street swing bridges. A swing bridge was impossible because it would interfere with the movements of both of the existing swing bridges. One of the ablest American engineers submitted to the management of the railroad company a pivot bascule bridge design, similar to the Tower bascule bridge at London, England, which was then under construction, and it seemed to be the only feasible solution of the difficulties, and detail plans were prepared for the construction of the bridge, but in working out the details, objectionable features became more apparent. The bridge question was becoming critical and the management of the railway company consulted William Scherzer with reference to overcoming the objectionable features of the design. After careful study of the problems, William Scherzer became convinced that it was impossible to eliminate the objectionable

WILLIAM SCHERZER.
Inventor of the Scherzer Rolling Lift Bridges.

features of the pivot or trunnion type of bascule bridge. As the railroad was nearing completion, the bridge problem became very critical and induced William Scherzer to endeavor to solve the problem on entirely new lines. This ultimately led to his invention of the type of bridge known as the Scherzer Rolling Lift Bridge. He prepared a design for a four-track rolling lift bridge, which was at once adopted by the railroad company for construction. It was also decided by the railroad company and city authorities to remove the obstructive center-pier swing bridge at Van Buren street and replace it with a Scherzer Rolling Lift Bridge. The plans for both of these bridges were completed by William Scherzer shortly before his death, which occurred on July 20, 1893.

The complete success of the above-mentioned

bridges has been the foundation for the unparalleled success and rapid adoption and use of the Scherzer Rolling Lift Bridge throughout the world. The invention of the Scherzer Rolling Lift Bridge formed a new era in movable bridge construction, enabling and facilitating the improvement of waterways and the accommodation of the ever-increasing railroad, electric railroad and highway traffic.

William Scherzer was unmarried. He was a member of the American Society of Civil Engineers, the Society of Engineers for Western Pennsylvania, the Western Society of Engineers, The American Society for the Advancement of Science, and the University Club of Chicago, besides a number of social clubs.

Albert H. Scherzer, president and chief engineer of The Scherzer Rolling Lift Bridge Company, was born at Peru, La Salle County, Illinois, and is the son of

ALBERT H. SCHERZER.
President and Chief Engineer, The Scherzer Rolling Lift Bridge Company.

William and Wilhelmina Scherzer. After completing his preliminary education at the high school of his native city, he went to Europe, where considerable time was devoted to study at the universities in Zurich, Switzerland. Returning to this country in 1882, he became identified with the Illinois Zinc Company of Peru, Illinois, one of the largest firms in the world engaged in the smelting and rolling of sheet zinc, remaining with that company for the following eight years. In 1890 Mr. Scherzer came to Chicago and entered the Union College of Law, pursuing the regular course leading to the degree of LL. B., and graduating therefrom with the class of '92. He subsequently entered upon the practice of his profession, but in 1893, upon the death of his brother, the late William Scherzer, the inventor and patentee of the Scherzer Rolling Lift Bridges, he gave his attention to the development of the business established by him.

Mr. Scherzer has made an exhaustive study of movable bridges, and in pursuit of his studies along this line has traveled extensively throughout both this country and Europe, visiting all the principal structures of that class.

Under Mr. Scherzer's management the scope of the business has been very widely extended. In addition to the many large railroad, electric railroad and highway bridges of the Scherzer type in successful operation, more than thirty of the largest movable bridges in the world are now under construction in the United States and abroad upon the designs and plans and under the supervision of the Scherzer Company. The very high standing which this company has attained under the direction of Mr. Scherzer is evidenced by the fact that they are retained as consulting engineers by the principal railroad companies and the largest municipal corporations for the largest, most important and difficult movable bridges.

Mr. Scherzer was married to Miss Donna Gunckel Adair of Dayton, Ohio, in May, 1902.

Samuel Worthington McMunn, president and treasurer of the Kindl Car Truck Company, is one of the best known manufacturers in Chicago. His offices are at 135 Adams street. He has extensive business interests both in Chicago and throughout the West. Mr. McMunn was born at Sharon, Noble County, Ohio, March 20, 1850, the son of Isaac and Maria McMunn. He attended the public schools and later Sharon Academy in his home town. For some time after leaving the academy he taught school, when he entered business in the employ of the Ohio River Salt Company at St. Louis and later became a member of the firm of G. L. Joy & Company, the successors to that concern. Shortly after this he became president of the American Transportation Company and also president of the American Brake Company. From 1884 to 1889 he lived in New York as the manager of the Consolidated Coupling Company. In the latter year Mr. McMunn moved to Pittsburg, where he was identified for five years with the Carnegie Steel Company. He came to Chicago in 1894 as the manager of the Otis Steel Company. He later became interested in the Kindl Car Truck Company and is at present the active head and treasurer of that concern. Mr. McMunn is also a director of the Raymond Concrete Pile Company, second vice-president of the Oro Verde Mining Company of Colorado, director of the Page Woven Wire Fence Company, president of the United States Steel Piling

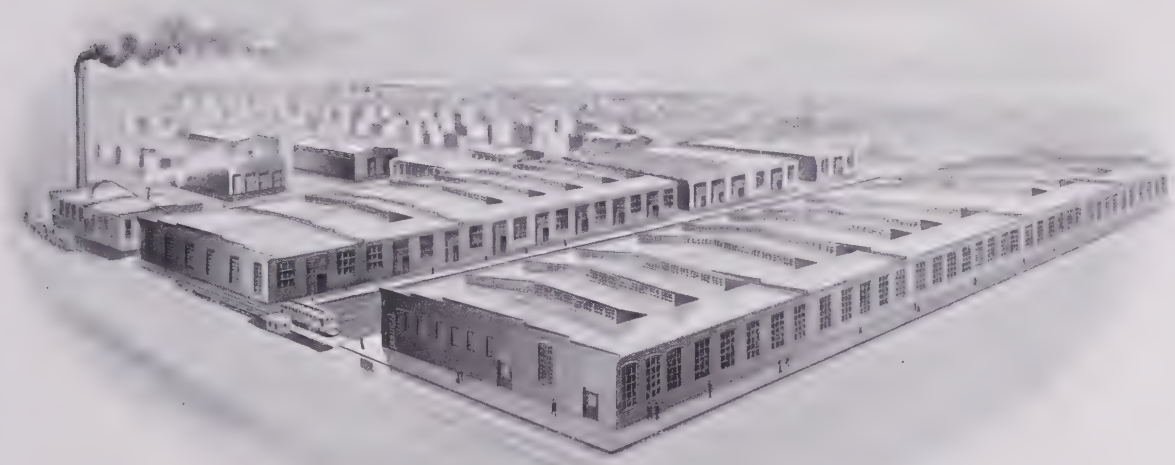
McCord is president of the Chicago & Calumet River Railroad Company.

Mr. McCord was married on December 26, 1896, to Emily Davis Rowe of Evanston, daughter of Mrs. C. H. Rowe. They have one daughter, three years old. He is a member of the Chicago Club, the Union League Club, the University Club and the Princeton Club of New York. Mr. McCord is an enthusiastic automobilist and his interest in golf is evidenced by membership in both the Glen View Club and the Skokie Country Club.

John J. Cummings was born in Christian County, Illinois, July 25, 1874. He is president of the Cummings Car Company, the largest manufacturers of street railway cars in this state, and also president of the McGuire-Cummings Manufacturing Company, builders of trucks, snow sweepers, sprinklers, electric locomotives and other railway specialties.

This latter company has been in business twenty-one years, and is known almost as well in foreign countries as at home. Their trucks are running on all the elevated and surface lines in Chicago, and on railways in all parts of the country, from New York to San Francisco, as well as in Canada. These companies employ about 1,000 men, and have shipped their product to all parts of the globe. In Africa, South America, Cuba, Australia, England, Japan and the Continent are seen rolling stock manufactured by them. The Metropolitan tramways of London use their pneumatic sprinkling cars. The "Tuppenny Tube" underground railway in London uses their trucks and when the Paris & Versailles division of the Western Railway of France was built, they were authorized to purchase the best equipment in America, and they bought the trucks from this firm, although Chicago is 1,000 miles inland. The entire lines owned by the Australian government are furnished with them, the same being true of the cities of Havana, Cuba, and Glasgow, Scotland, Brazil and Peru are fitted out as well, and even Siam has its quota.

The Cummings Car Company plant at Paris, Illinois, which has attracted the attention of the industrial world, is known throughout the country as the most modern manufacturing plant of its kind in the United States, and covers thirty acres. The east building is the main erecting shop, 600 feet long by 175 feet wide, with floor space for 140 cars. It is crossed with fire walls. The buildings east of this shop include a finishing shop, cabinet shop, wood-working machine shop, truck shop, machine shop and forging shop. Between these and the main erecting shop is a 76-foot transfer table, operating electrically the full length of the factories and to the car-loading table. An iron and steel warehouse and three dry lumber warehouses, a power plant with a capacity of 700 horsepower and entire electric transmission and brick dry kilns, with the latest improved lumber-drying appliances, complete the equipment of this model institution. The plant embodies the most modern features of first-class construction, evidenced by the lowest insurance rate of any



VIEW OF CUMMINGS CAR COMPANY'S PLANT.

car plant in the United States. It is located on the Big Four, New York Central Lines, Cairo Division of the Big Four and the Vandalia-Pennsylvania system.

Chicago Bridge & Iron Works. Going in any direction from Chicago the traveler will notice in many of the small cities and villages steel water towers or large round-bottom tanks high in air. If the traveler were to examine the manufacturer's stamp on tower or tank he would find that most of them had been constructed by the Chicago Bridge & Iron Works.

Up to 1894 the company had been engaged in the building of bridges, but about that year the small towns throughout the country began to construct waterworks systems and the Chicago Bridge & Iron Works was the first concern in the field to meet the demand for tanks and towers. The concern developed the present type of hemispherical bottom, steel storage tanks for pressure, a large number of which have been constructed within the last ten years. The manufacture of water towers followed and the company became more widely known as a builder of water tanks and towers than of bridges. For the same reason it has become more widely known throughout the United States than any other bridge company.

The Chicago Bridge & Iron Works has erected water towers in every state in the Union except six, and has built a large number in Canada, Mexico and Cuba. The company's plant is located in Washington Heights at One Hundred and Fifth and Throop streets, between the main lines of the Rock Island and Pan Handle railroads. On this site, which is about ten acres in area, the company built its first shop in 1889. It was constructed of wood and in the fall of 1897 was destroyed by fire. The following spring it was rebuilt entirely of brick and steel. For the first five years the company devoted its energies to the manufacture and erection of highway and railway bridges and many a country road bears testimony to its industry.

In 1903 the properties of the Chicago Bridge & Iron Company were taken over by Mr. Horace E. Horton, who for some time had been the owner of all the stock of the company. Since that time his business has been transacted under the name of the Chicago Bridge & Iron Works. The officers of the company are Horace E. Horton, proprietor; George T. Horton, engineer and manager; Henry W. Wilder, office director.

Alfred Stromberg, founder and vice-president of the Stromberg-Carlson Telephone Manufacturing Company of Chicago, and Rochester, New York, whose plant is recognized as the most extensive and complete in the independent telephone field of America, is a native of Sweden, born near the city of Stockholm, March 9, 1861. Mechanical achievement was a familiar idea to him from infancy, he being the son of Andrew Stromberg, one of the largest threshing-machine manufacturers in Sweden. His early training in electrical work he acquired in his native country, side by side with L. M. Erickson, the well-known European telephone manufacturer. External influences, however, served to indicate the direction in which the marked abilities and energies of the boy were to operate, and whetted his enthusiasm in the progressive field of labor in which he has won his great success. Before coming to America he had some practical experience in his chosen specialty, having assisted in the tests of the first pair of telephone instruments sent to Stockholm by the Bell Telephone Company and having had charge of part of the work of installing their exchange, and later he conducted the construction and installation of numerous exchanges throughout the northern peninsula and Denmark.

VIEW OF PLANT, CHICAGO BRIDGE & IRON WORKS.

The year of 1884 found him entering upon his career in this country in the repair department of the Chicago Telephone Company, where he was given full charge, not only of the repairing but the changing of all instruments and the practical application of new ideas issuing from the engineering department. In 1885 young Stromberg entered the instrument department of the Bell Telephone Company in Chicago, and for the next five years was prominently connected with the manufacturing department of the company's rapidly expanding business, inventing in the meantime a number of improvements, some of which are still used by that company.

In 1890 he associated himself with the Chicago Electric Protective Company as superintendent of their burglar alarm system, and while with that company made many improvements and inventions, which are still utilized by them, and through which was practically secured to them the entire control of this line of business against the strongest opposition by the Bell Telephone Company.

Upon the expiration of the fundamental patents of the telephone receiver in 1893, Mr. Stromberg, with Mr. Andrew Carlson, organized the Stromberg-Carlson Telephone Manufacturing Company, whose growth since that year, both in point of industrial dimensions and of reputation, is among the notable developments in the electrical field. The company was incorporated and all the capital possessed by Mr. Stromberg and Mr. Carlson, which was considerable, was put in the business. The status of the company was sound. Conscientious care was taken not to infringe any valid patent claims of other concerns, and the electrical and mechanical engineers employed were experts in their special lines. The enterprise has always been under the control of Mr. Stromberg and Mr. Carlson. The establishment was located on West Jackson boulevard and Clinton street, the massive brick building and the nearly half of a block it covers, being owned by the company and valued at $400,000. From fifteen 'phones per day the output increased to seven hundred. Nearly all the improvements manufactured by the company are protected by United States patents, issued to Mr. Stromberg or to him and Mr. Carlson jointly, and these gentlemen have done more for the independent telephone patrons than all the other manufacturers combined.

By the beginning of 1902 the business had grown to such proportions that additional capital was necessary to meet the demands upon the company for its apparatus and telephones, and Mr. Stromberg succeeded in interesting capital from Rochester, New York. The result was that the Stromberg-Carlson Telephone Manufacturing Company was organized under the laws of the State of New York, and succeeded to the business of the company, which had been organized under the laws of Illinois, and Mr. Stromberg was made vice-president of the new company. The capital of the new company was $3,000,000, and plans were made for building another factory in Rochester. Since that time the capital has been increased, owing to the growing business of the company, and now it is $6,000,000, and the factory at Rochester has been built covering over seven acres of floor space, and all the latest and best machinery has been put in to manufacture the highest type of apparatus and instruments.

The company employs about 3,000 people in all departments, and Mr. Stromberg's relations with his force and his good judgment in selecting employees are the most satisfactory and creditable. He is just in every

ALFRED STROMBERG.

way and as his business has prospered he has advanced the pay of his men without solicitation. Throughout his rise to his present enviable position he has maintained the same pleasant attitude toward his help and given the same careful attention to the needs of his patrons, so that by both classes he is much appreciated.

Mr. Stromberg is a family man, having been married in 1866 to Miss Ellen Johnson of Chicago. They have a family of four children, Minnie, Alice, Emil and Eva. In politics Mr. Stromberg is a stanch Republican, but has never aspired to any prominence in this direction, his energies and interest having been concentrated upon his chosen industry. One who has enjoyed a long business acquaintance with our subject says of him:

"In some respects Mr. Stromberg is the most remarkable man I have ever known. Of humble origin,

he has by native ability, coupled with persistent effort, risen to his present high position in the business world as head of its largest independent telephone company. His quick perception enables him to grasp a situation at once and to master every detail of the proposition involved. His life is wrapped up in his enterprise, and he has put work into it which no one can appreciate except those who are intimately associated with him. A capable man at the outset, he has constantly developed with the growth of his business interests. From a working mechanic with a daily wage of two dollars to a man of large affairs and wealth in the short space of a dozen years is a record which few can boast; but with it Mr. Stromberg has retained his simple and direct manners and the respect and esteem of his associates."

AUTOMATIC ELECTRIC COMPANY'S PLANT.

Automatic Electric Company. Following the birth of the independent telephone movement, some ten years ago, Chicago became the center for the manufacture of apparatus for the independent companies, and at this date there are a score or more of these factories making everything from complete telephone plants down to the smallest appurtenances. The largest independent factory in the city, if not in the entire country, is that of the Automatic Electric Company, manufacturing automatic telephone switchboards and apparatus.

This company is the successor of the Strowger Automatic Telephone Exchange in the manufacturing field. Three or four years before the launching of the Independent telephone movement, A. B. Strowger brought to Chicago a crude model of an apparatus designed to do away with telephone operators. This was called an automatic telephone switch. Strowger showed his invention to various people in an endeavor to secure financial backing. Mr. Joseph Harris was the first to recognize the latent commercial and financial possibilities in the invention and, with A. E. Keith and others, organized the Strowger Automatic Telephone Exchange for the purpose of controlling the Strowger patents and developing and manufacturing the switch. Offices were opened in Chicago and an experimental station was established at La Porte, Indiana, in 1892, and used for three years. Several small exchanges were built, some of which, notably those at Albuquerque, New Mexico, and Manchester, Iowa, are still in operation and giving satisfactory service.

Mr. Harris and his associates allied themselves with the independent telephone movement at its commencement and therefore deserve to be classed among the pioneers in it, and the first in the automatic field. During the ten years in which the Strowger Automatic Telephone Exchange manufactured the switches more effort was devoted to bringing the apparatus up to a high standard of mechanical excellence than to disposing of the product, and it was not until the organization of the Automatic Electric Company, in 1901, that any great amount of progress was made in the selling of the apparatus. At that time, by additional patents and improvements, the system had advanced so far in its development that larger things could be and were undertaken.

The first exchange of 20,000 capacity was built in Dayton, Ohio. It has an installation of 6,000 stations. This exchange was put in operation on June 1, 1903. About the same time the first exchange with 100,000 capacity was installed in Chicago, for the Illinois Tunnel Company with nearly 10,000 stations in operation.

The largest exchange outside of Chicago is that at Los Angeles, California, which was completed in August, 1905, with more than 9,000 lines. The ultimate capacity of the Los Angeles exchange is 100,000 lines, the same as that of the Chicago exchange. Other cities in which automatic exchanges have been installed and are in operation at present, are: Grand Rapids, Battle Creek, Pentwater and Traverse City, Michigan; Columbus, Dayton, Van Wert and St. Mary's, Ohio; Lincoln and Hastings, Nebraska; Portland, Lewiston and Auburn, Maine; San Diego, Riverside, Ocean Park and Sawtelle, California; Wilmington, Delaware; Fall River and New Bedford, Massachusetts; and a number of smaller places. Other cities in which the automatic telephone exchange has been adopted, and at the present writing (August, 1905), is being built or installed, are: Sioux City, Iowa; El Paso, Texas; Havana and Marianao, Cuba; Portland, Oregon; and several smaller places.

The officers of the Automatic Electric Company are: C. D. Simpson, Scranton, Pa., president; Joseph Harris, Chicago, vice-president and general manager; C. C. Wheeler, Chicago, secretary; A. G. Wheeler, Jr., New York, treasurer; and the following, in addition to the above-mentioned gentlemen, are directors: A. G. Wheeler, J. B. Russell and C. B. Eddy. A. E. Keith is general superintendent and chief engineer.

The general offices and manufacturing plant of the company are located in a large six-story, brick building on the southwest corner of Van Buren and Morgan streets, Chicago. The factory is one of the most completely equipped in the country for its work. Nearly eight hundred hands are employed, and the most modern machinery, much of it automatic, is in use. So complete is the plant and the system of manufacturing that an entire automatic exchange of five hundred lines can be built in one day. The automatic telephone system manufactured by this company has proven itself a mechanical, commercial and financial success. It is revolutionizing the telephone business. The Automatic Electric Company is still allied with the independent telephone movement and sells only to independent companies.

E. Schneider & Co., one of the largest manufacturers in the world of candles, oil and glycerine, has been located in Chicago since 1865. The corporation was founded in St. Louis in 1842, and has had a continuous existence under the same name for sixty-three years. The firm was first organized for the manufacture of soaps, in addition to the lines to which it now confines its energies. E. Schneider was the company's first president and Anthony Schmitt entered office at the same time as secretary and treasurer.

When the firm moved its office and factory to Chicago, it found that another concern was located here manufacturing the same lines. By mutual agreement E. Schneider & Co., discontinued the manufacture of soaps, which had grown to a large proportion of its business, and in return the rival concern abandoned the field as far as the manufacture of candles, oil and glycerine were concerned.

The "stearic wax" candles of E. Schneider & Co. are now favorably known in every mining district of the world. The concern specializes in the making of candles for mining and such purposes. The glycerine it produces is in the crude state for trade purposes. Ever since the concern was incorporated in 1881, it has been a close corporation. After the death of Mr. E. Schneider, in 1889, his business associate, Anthony Schmitt, succeeded as president of the corporation. Mr. Schmitt has continued in that office since then. The other executive officers of the corporation are: A. G. Schmitt, vice-president and treasurer, and C. P. Woodcock, secretary, who has been connected with the concern for many years.

The main offices of E. Schneider & Co., are in the Fisher building, 277 Dearborn street. Its factory occupies the block fronting on Wallace street and bounded by Twenty-fourth and Twenty-fifth streets.

The Cable Company, in the course of twenty-five years, has developed from a factory of insignificant size to the greatest institution manufacturing pianos and organs in the world. This phenomenal growth has been due largely to the two great factors which enter into the conduct of almost all institutions which reach supremacy—the production of articles offered at prices which give the buyer the full measure of value and an

organization by which manufacturing and selling can be carried on with the highest efficiency.

The results of the policy which has directed the interests of this company are shown in two immense factories, branch houses in leading cities, agencies in all parts of the United States and Europe and a business which covers both hemispheres.

The productions of The Cable Company comprise all grades of pianos and organs from the reliable, moderate-priced instrument to the masterpiece of design and craftsmanship. It has always been the accomplished

CABLE BUILDING.

purpose of this institution to make every instrument, whatever its grade, the best in every feature that could be offered at a given price. The natural consequence has been that these instruments have set the standard in their respective classes and have attained an unparalleled popularity.

In the entire conduct of its business this company has followed broad-gauge, progressive methods which have fully kept pace with the advance of modern commercial life. To visit its factories and offices is to be impressed at once with the splendid organization of every department, the remarkable system by which every department co-operates with all the others and with the executive ability which is demonstrated in their operation.

It has always been the custom of the Cable Company to employ supervising talent of the highest order, to select its workmen with regard to both skill and personal character and to train each one in some special operation. It has at its command, therefore, a force of specialists who naturally are much more accurate in the performance of their work than any general mechanic can be.

A department is maintained where special machinery is designed and built exclusively for use in the company's factories, and by this means it has introduced many devices which have increased the efficiency of operations to a remarkable degree and made it possible to reduce the cost of manufacturing to a minimum, and at the same time to improve the quality of the productions.

Back of all this splendid manufacturing organization and office system is a policy, unhampered by traditions, which does not hesitate to establish precedents; a policy that points the way toward larger growth and greater prosperity, and it is but a natural result that such an institution should have attained pre-eminence in its field.

The Steger Piano Company owes its existence and success to John V. Steger, its president and founder. In the year 1854, in the little city of Ulm, Wurtemburg, South Germany, John V. Steger was born, under humble and unauspicious circumstances. At the age of fourteen he was apprenticed to a woodworker by his father, who was himself a cabinetmaker. He remained in his employ for three years, and then started for America.

Having no knowledge of the English language, with a capital of but twelve cents, alone in a foreign land and among utter strangers, it was this sturdy German lad "started out to make his fortune."

The first thing this young man did was to form a resolution which was never afterward broken. It was to live within his resources. Having as a capital with which to start in life but twelve cents, he made an expenditure of five cents for a piece of pie, reserving the seven cents as a capital against need until he should have earned something. Within six hours John V. Steger was employed. He was engaged at rough carpenter work in the reconstruction of ice-houses on the Hudson river. It was not a desirable position, as he was fitted for something better, being fully competent to earn more than he would receive for this work, but it was the best available, and he took it. Within two months he returned to New York with his savings, which amounted to more than one-half of his wages. This sum he divided into two equal portions, one that was not to be expended under any circumstances, the other to

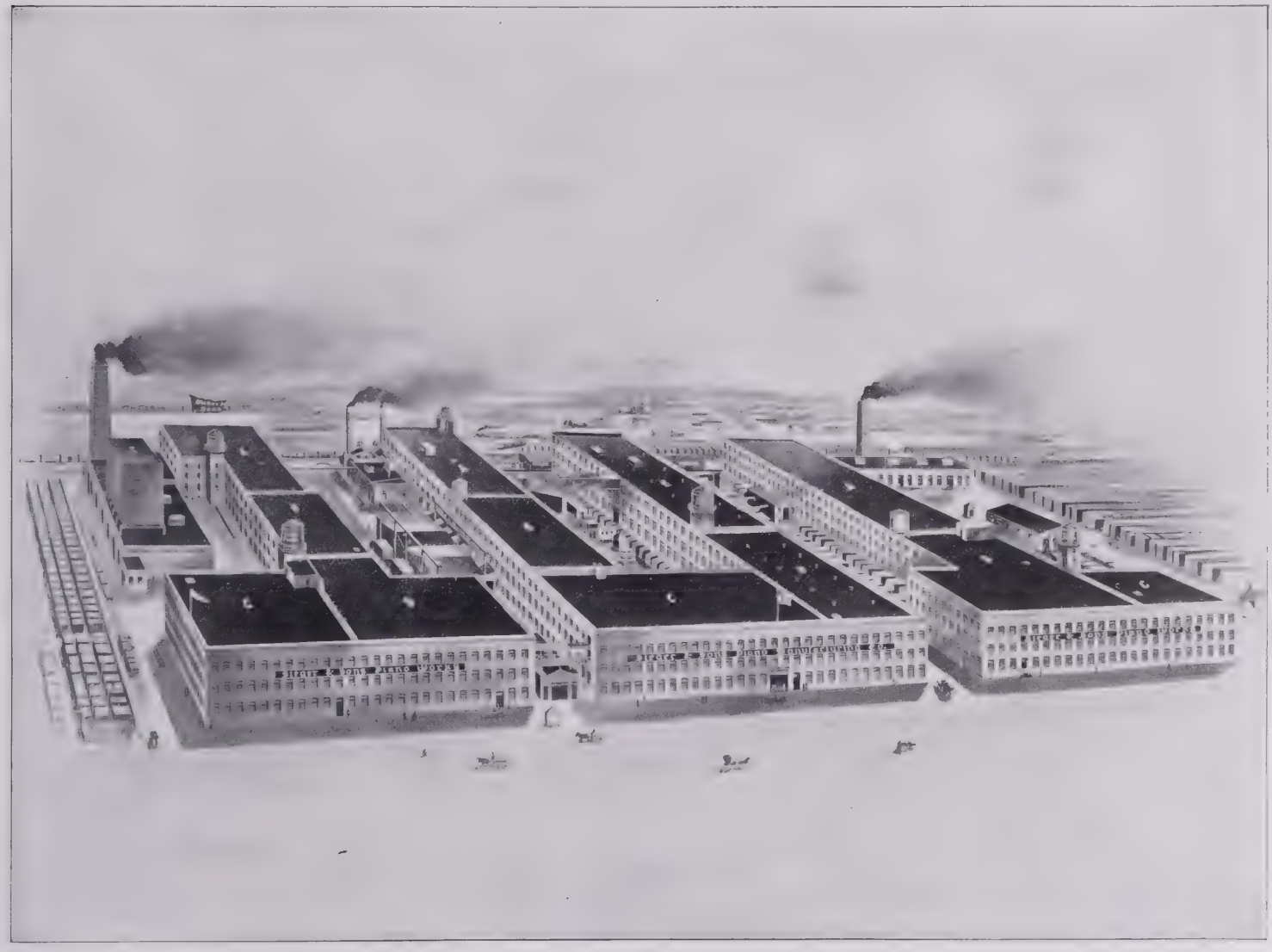
supply his wants and necessities until he could again get work.

Shortly afterward he secured a position at the bench as a cabinetmaker, and for a year his wages averaged $10.50 per week. Of this amount he invariably placed $5.50 into his reserve fund; always this much, sometimes more. He then resolved to seek a new location in Chicago. He was also intensely desirous of acquiring a better knowledge of the English language, and it is needless to say that whatever John V. Steger set out to do he accomplished.

After being in this country but two years, and, being a young man of rare good sense, he realized that he could not prosper if he remained single. Accordingly he sought the hand in marriage and was wed to Miss Louise R. Jacobs, a daughter of one of Chicago's first settlers.

For eight years he worked for others, but during all this period the indomitable purpose to accumulate prevailed. The sum of $12 was allowed for household expenses, and the balance of his earnings was placed in a bank. The sum grew until it reached $3,900, when it was withdrawn from the bank and invested in the piano business, the location chosen being 154 State street.

In 1881 a change was made to 109 Wabash avenue, the same having become necessary by reason of greatly increased business, which was annually becoming larger in volume. His quarters here were much more extensive than his former location, the rental being twelve times in excess. Within three years another change was necessitated by the demands for space, and the location chosen was Adams street and Wabash avenue. Here he lost everything in the Langham Hotel fire, and devoted the next four years in building up his business at State and Jackson streets. In 1891 he made his final removal to his present location, northeast corner of



STEGER PIANO WORKS.

Jackson boulevard and Wabash avenue, where he has established a trade second to none in the United States.

Mr. Steger has surrounded himself with a corps of able and efficient assistants, but still devotes his time to the active management of the immense interests connected with the business. He is in constant touch with his men. As fully and thoroughly acquainted with every detail of the vast works as is the most efficient of his employees, Mr. Steger evinces an interest in all that is going on, and with tireless energy superintends the operations, and from early morning until late at night carefully oversees the vast establishment, as well as keeping in touch with the selling branch of the business. This involves tireless, ceaseless vigilance, and as "eternal vigilance is the price of liberty," so John V. Steger believes it the price of business success.

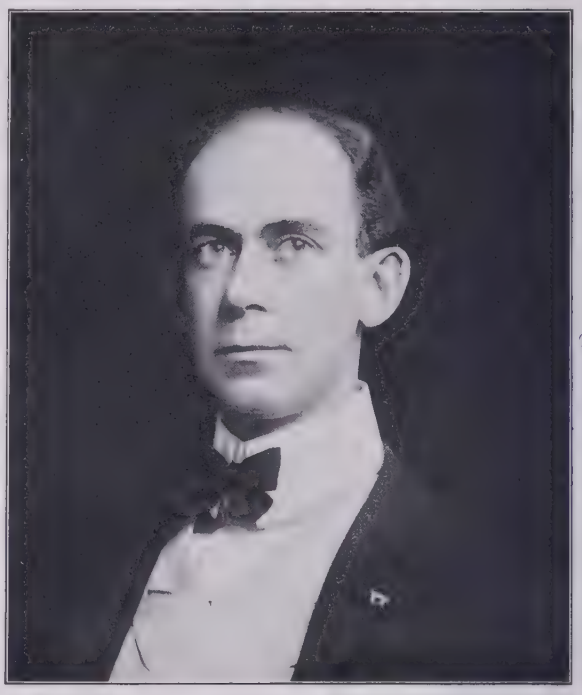
In the year 1891 there was purchased in the suburb of Chicago twenty acres of land, and a single building erected as a piano factory, in which the manufacturing of the Steger pianos was begun. To-day living in Steger are about 2,500 persons mainly composed of workmen in the extensive Steger piano manufacturing plant. Another such a town does not exist on the face of the

JOHN V. STEGER.

earth, and in no other collection of human beings of a similar extent in numbers does peace, happiness, plenty and contentment reign as here. Wherefore, John V. Steger may be rightly accounted as one who loves his fellowmen.

The United States Peat Fuel Company is indeed a name to conjure with, for its business bids fair to rival some of the great industrial organizations of this century. Its general offices in the Fort Dearborn building are among the most complete and elegant in this city, while its officers and directors are all men of affairs and prominence in commercial circles.

Henry D. Bushnell, the president of the company, is a fitting head for this great institution. He is consid-



HENRY D. BUSHNELL.

ered an authority on corporate organization and development, and is backed with exceptional executive knowledge and ability, the outgrowth of a lifetime of labor in the vineyard of corporate management. Mr. Bushnell is also the executive head of one of the largest American controlled foreign trading and transportation companies and a director in several other corporations of moment in the business realm. His services are in great demand and his advice is sought almost daily upon troublesome and intricate corporate questions by prominent business men throughout the United States. Had Mr. Bushnell turned his energies to law instead of to commerce there is no question but what he would have stood head and shoulders among the great corporation lawyers of this country. This fact, coupled with his far-seeing executive ability, eminently qualifies him to direct the tremendous possibilities of the peat fuel business.

John Addison, first vice-president, was for over thirty years one of Chicago's most noted architects, a gentleman of wide social and business acquaintance and recognized integrity. Many of this city's largest business edifices and palatial homes stand as monuments to his artistic talents and construction management. The other officers of the company are: Murry A.

Pierson, treasurer; Chas. H. Ade, secretary; J. Campbell Morrison, consulting engineer; Dave Williams, mechanical engineer, and Daniel F. Flannery, general-attorney. All of these men are prominent in the business, professional, social, club and fraternity life of Chicago, but space forbids a detailed record of their individual accomplishments and successes.

The United States Peat Fuel Company controls a monopolistic line of patents on the manufacture of peat fuel in this and some fifteen foreign countries. It is the parent organization governing the industry under its patented processes, systems and machinery in every land. A large number of subsidiary corporations have been organized in the United States and throughout the world. The list is growing steadily, and there seems no reasonable doubt but what the number of subsidiary plants paying tribute to the parent company will reach into the thousands.

The industry is fast assuming gigantic proportions, and by some well informed authorities it is predicted that the business controlled by this corporation will within the years to come equal in magnitude and influence that of coal mining. It must of necessity reach out and its branches will be permanent industrial factors in every civilized country.

The company is now manufacturing its fuel in commercial quantities, and has contracted for the installation of other large plants—one of which is to be located a few miles from the business center of Chicago. This factory will be the mecca for engineers and fuel experts from every corner of the globe.

The fuel has been demonstrated to be fully the equal of high-grade anthracite coal, but is smokeless, sulphurless, sootless and clinkerless. The cost of manufacture is below the cost of mining coal, and the crude material used is nothing more or less than common bog, swamp or marsh land.

But little stretch of imagination is necessary to fully realize the present and future commanding influence of this company, for by its efforts and under its process and machinery the vast bog lands of the earth are rapidly being converted into fuel mines of stupendous output and value.

The Corn Products Company was organized March 1, 1902, for the production from corn of glucose, grape sugars, corn syrups, various grades of laundry and edible starches, dextrines of all grades and British gums. It is an amalgamation of a number of subsidiary organizations, each manufacturing one or more of the products of corn, and its expansion along only one of many lines has been such that it makes practically every brand of laundry and edible starch now on the market. The Corn Products Company grinds in the manufacture of its multitudinous products, thirty-five million

PLANT OF THE CORN PRODUCTS COMPANY.

bushels of corn per annum, or an amount equaling over one-fourth of the corn exported by the United States. Its works and factories, giving employment to six thousand persons, are located in fifteen different cities and towns as follows: Chicago, Illinois; Buffalo, Oswego and Glen Cove, New York; Lockland and St. Bernard, Ohio; Indianapolis, Indiana; Nebraska City, Nebraska; Waukegan, Rockford, Peoria and Pekin, Illinois; and Des Moines, Davenport and Marshalltown, Iowa.

Its Chicago factory, located at West Taylor street and the river, covers an area of eight acres and is probably the largest, most modern and best equipped factory in the world. At this one factory of the company the amount of corn ground daily is thirty thousand bushels.

Corn syrup (glucose) and allied products have been produced for some years past, but the development of their manufacture and their popularization among consumers with the consequent increase of the demand to an enormous extent, both domestic and foreign, has been a matter of the last few years. The results have been most profitable to the American farmer since it has developed uses for corn formerly unpracticed, and thus supplies a daily cash buyer for the large surplus of this commodity. In affording employment in a new field, and in the consumption of coal, tin and other products necessary to its manufacture, also, the company occupies a distinct and important place in the nation's economy.

Among the well-known starches which it produces are Kingsford's Silver Gloss, a laundry starch, and Kingsford's Corn Starch, both of which brands have long been household necessities, and the high quality of which the Corn Products Company has maintained.

Of corn syrups, its best known product is "Karo" Corn Syrup, compounded of 85 per cent of corn syrup and 15 per cent of cane syrup. It is a predigested article of food of exceptional purity, manufactured from starch contained in corn and its use is general, the low price at which it can be bought, added to its flavor and wholesomeness, popularizing it throughout the world.

The officers of the Corn Products Company are: C. H. Matthiessen, President; C. L. Glass, Vice-President and Secretary; Benjamin Graham, Treasurer. Executive Committee: C. H. Matthiessen, W. J. Calhoun, Charles E. Glass.

GARFIELD PARK.

CHAPTER XXIII.

CHICAGO'S BUSINESS INTERESTS.

MARSHALL FIELD & COMPANY. The name of Marshall Field and business integrity have become synonymous in Chicago and the West. In the jobbing trade and the retail business of the great firm of Marshall Field & Company, this reputation for square dealing is the foundation stone of its success. Of the millions controlled by it this good name is its chief asset. This application of the principle of "a square deal" has resulted in making this company the largest mercantile institution in the world. Of the great throngs of buyers who enter Marshall Field & Company's establishments every day, there is not one of them but feels that every penny spent there will purchase its full value of the best goods of the kind the market affords. The neatly wrapped bundles bearing the name of "Marshall Field & Company" have upon them the stamp and guarantee of integrity and quality.

The very atmosphere of the establishment is refreshing. The uniform courtesy of every employee, the consideration they show to one another, the absolute frankness with which even the smallest transaction is carried on, the lack of all quibbling—all make for one end—the complete satisfaction of the purchasing public. It is the working out of the basic principle of the concern. "A satisfied customer first, a profit second," is the fundamental rule every employee of the store must follow. This has bred a confidence that makes every man, woman or child who enters the great house of Marshall Field & Company feel confident of fair and courteous treatment. And this confidence is indeed the greatest of all Marshall Field's millions of fairly won fortunes.

The establishments of Marshall Field & Company present an array of merchandise as complete as human ingenuity, energy and wealth can secure. Its buying organization is the largest single factor in the world's markets. Every country or province produces something in art, material or manufactures that goes to make up the stock. Permanent buying offices are maintained at New York, Paris, Manchester, Nottingham, Bradford, Chemnitz, Calais, St. Gall, Lyons, Plauen, Annaberg and Yokohama. In Kashmir, India, there is a large rug factory, operating 178 looms, controlled by Marshall Field & Company. The outputs of numerous other factories in almost every country are controlled by this house.

The great retail store occupies practically the entire block bounded by State, Randolph and Washington streets and Wabash avenue. The floor area is now about one million square feet, equivalent to twenty-three acres or eleven city blocks of ordinary size. The frontage on State street is 385 feet; on Washington, 341 feet; on Randolph, 190 feet; and on Wabash avenue, 266 feet. A new 12-story building, now in process of erection, on Wabash avenue, will add about 30 per cent to the present area of the retail premises, making a total area of 1,300,000 square feet, or about 30 acres. The ultimate plan is to make the State street frontage of a uniform height of twelve stories of solid granite with an imposing central entrance. Over half of this frontage is now occupied by such a building. The main entrance on State street is marked by four large granite monolith columns and when the building to the south, extending to Washington street, is completed, will form, as it now does, the central feature of the State street front. The principal building is of steel construction,

faced with gray granite—a simple and massive style of architecture. The foundation for this structure consists of 84 concrete caissons sunk down 100 feet to "hard-pan."

Two immense light shafts extend from the first floor to the skylights, the extreme height being 234 feet. An ornamental iron and mahogany railing encloses the court on each floor. The view from the top story down is a grand panorama of a portion of the interior. The large white columns extending the length of the store form some of the most imposing colonnades in existence.

MARSHALL FIELD & COMPANY'S WHOLESALE HOUSE.

On the first floor the aisles and showcases are arranged on a most generous scale for the comfort of the large crowds of shoppers that continually stream through the store. The usual crowding and discomfort of a large establishment is in this way entirely avoided. The same generous treatment of space for aisles, showcases, counters and fixtures pertains throughout the entire establishment. In no city in the world can be found such a magnificent arrangement. The "main aisle" is a most remarkable interior thoroughfare, extending one entire block from Washington street to Randolph street, a distance of 385 feet. The showcases on either side are of solid mahogany and plate glass, the framework being of the lightest possible construction, which gives the effect of the cases being practically of solid glass. They are brilliantly lighted by invisible incandescents and, filled as they are with the most beautiful merchandise which the store affords, form a magnificent sight. This main aisle may be said to be one of the show places of Chicago, great throngs of people visiting it for the many beautiful displays which it affords.

The first floor of the main building is devoted to dress accessories, laces, ribbons, gloves, hosiery, notions, shoes, men's furnishings, etc., all of which lend themselves to a most artistic arrangement. On the second floor are the dress goods, silks, linens, prints and white goods, such as are sold by the yard. The third floor is devoted to muslin underwear, corsets, aprons, infants' wear and boys' clothing. The fourth floor is one of the attractive spots of the great establishment. Here are to be seen extensive displays of women's hats and millin-

ery material, gowns and outer apparel and furs. On the fifth floor are found rugs and carpets of every foreign, oriental and domestic weave; trunks, toys, baby carriages, baskets, athletic goods, etc. The sixth floor is devoted, for the most part, to high class house furnishings, such as lace curtains, upholstery goods, fine furniture, pictures, metal beds and high-class wall paper. The tea and grill rooms occupy the entire seventh floor, there being accommodations for seating 2,000 persons. The upper floors are devoted to the shipping rooms and various manufacturing branches carried on in connection with the retail store. On the twelfth floor is a cold storage vault where during the summer furs belonging to customers, aggregating $3,000,000 in value, are kept at a temperature of 12 degrees below freezing.

The Marshall Field & Company Annex is another modern fireproof structure, ten stories high, on the corner of Washington street and Wabash avenue. The first floor of the annex is devoted to stationery, silverware, leather goods and toilet accessories. On the second floor are hall clocks, optical goods, photographic supplies, fancy needlework and American Indian wares. The next two floors, third and fourth, are devoted to pottery, bric-a-brac, cut glass and china. They present a most beautiful display of art objects. The third floor in particular, which is known as the "pottery floor," contains a most extensive collection of American and foreign art potteries, metals, Japanese wares, Tiffany favrile glass and lamps, candelabra, jardinières and other art wares. The fourth floor is filled with a magnificent display of cut and Bohemian glass and fine china.

Few expositions have ever exceeded in quality and the completeness of the display the wares shown along the magnificent aisles of this great retail store. Every convenience is afforded to the public. There are reading, writing and rest rooms for the patrons and visitors. An information bureau is maintained where general directions as to railroads, street cars, ocean steamships, hotels, theaters and other information are given out. There is a branch postoffice where stamps, money orders, registered letters and other postoffice business is transacted. Near this is a telegraph and cable office. There is a clock which shows the comparative time of all the great cities of the world. A carefully selected library containing well selected books, the leading magazines and representative newspapers, directories of the principal cities, and other reference books, is another attractive feature. An emergency hospital fitted with complete surgical outfits is maintained. Telephone booths are found in all parts of the store for local and long-distance connection. A staff of guides speaking various languages is kept in connection with the information bureau to conduct visitors through the store, showing to them the many interesting features which otherwise might be overlooked.

The electrical plant supplies 30,000 incandescent, 200 arc lights and 50 electric elevators. All showcases are illuminated by concealed bulbs. The store has a pneumatic tube cash system, an automatic fire sprinkler system, a refrigerating plant for storage and water cooling purposes, a water filtering plant, a telephone exchange of 250 lines and a delivery system of 100 wagons and automobiles.

The retail store opens at 8 a. m. and closes at 5:30 p. m. Women employees report 30 minutes later in the morning and leave 10 minutes before closing time. An annual vacation of two weeks is allowed every employee who has been in the service more than a year and one week after six months. Lunch rooms, music rooms, gymnasiums, baths and such conveniences are provided for employees.

In the retail establishment are between 6,000 and 8,000 employees and in the wholesale are 3,000 more. These figures do not include the hundreds of persons scattered through all parts of the world in the service of the firm.

The number of customers who enter the store varies from day to day from 80,000 to 125,000. During the holidays it reaches 200,000. The week of the opening of the new building on State street, in September, 1902, it averaged 350,000 per day, reaching 450,000 on one of the days of that week.

Marshall Field, the head of the great mercantile house that bears his name, has been a prominent figure in the business interests of Chicago since he was a young man of twenty-one years. The business principles on which he started out in the Chicago field of commerce have been steadfastly adhered to and have characterized Mr. Field's leadership in the enterprise of which he is the head and which is now the greatest of its kind in the world.

Mr. Field was born in Conway, Massachusetts, August 18, 1835. His father was a well-to-do farmer and gave his son the advantages of an education in the grammar schools and later at Conway Academy. But at an early age Mr. Field's bent was toward business, neither the life of a farmer nor the glamour of a college education appealing very strongly to him.

When seventeen years old he started to work in a country store at Pittsfield, Massachusetts, remaining there until he came to Chicago in 1856. His first employment was as a salesman with Cooley, Wadsworth & Company. One year later this firm was reorganized as Cooley, Farwell & Company, and in 1860, when Mr. Field was but twenty-five years old, he became a junior partner in the concern. He soon took the lead in molding the policy of this house and in the reorganiza-

tion which took place in 1865 he became the senior member of a new firm known as Field, Palmer & Leiter. Two years later Mr. Potter Palmer retired to devote his time and attention to his great real estate interests and the name of the firm was changed to Field, Leiter & Company. Mr. Field's masterful grasp of business systems and detail was never more manifest than during the trying times following the Civil war. During the financial storms which swept the country, when many erstwhile substantial business houses were going down, and thus the example of Field, Leiter & Company became the turning point in what was perhaps one of the greatest revolutions in business methods of the last century. This system has now reached such a perfection that the percentage of losses through poor credits to Marshall Field & Company is only a very small fraction of 1 per cent.

The fire of 1871 wiped out both the retail and wholesale establishments of the firm. Coming as it did in the fall of the year when the heaviest stock is carried,

MARSHALL FIELD & COMPANY'S RETAIL PREMISES.

Viewed from the corner of Washington street and Wabash avenue, showing new building on the right.

Field, Leiter & Company survived. For some time Mr. Field had been observing the evils of the credit system as it then existed in the business world generally, with its long datings and promissory notes, and deferred payments, and to him must be given credit for turning back this tendency to the more sound methods which prevail to-day. At that time he established his wholesale business practically on a cash basis, giving discount for prompt payment, and paid cash on the same basis for all his purchases. The indisputable advantages of this system became more and more apparent to other houses, the loss aggregated $3,500,000. On this was carried an insurance of two and one-half million dollars, but little of this could be realized immediately and much of it was lost in the insurance failures that quickly followed the fire. In this crisis the cash system established by Mr. Field and which had placed the house on a sound financial basis, saved it from being involved in the general ruin.

Work on starting in business again was begun the day after the fire. The old car barns at State and Twentieth streets were rented by the firm and their

doors thrown open with but a slight interruption of business. Construction on the new building was got under way immediately and was completed the next year, the wholesale and the retail houses being located in different parts of the city. The first wholesale building still stands at Madison and Market streets, and is used as a warehouse and for factory purposes.

A new retail building was erected on the corner of State and Washington streets, and was occupied until 1877, when it was burned. Business was temporarily resumed at the old Exposition building, on the site of the present Art Institute. The following spring the store was moved to Wabash avenue, where it occupied part of the block between Madison and Monroe streets. In 1879 the business was moved into a new building at the old site, State and Washington streets. In 1888 the two five-story buildings on State street, just north of the original building, were acquired. In 1892-1893 the establishment was enlarged by the erection of the "Annex" building on the corner of Washington street and Wabash avenue, and within a comparatively short time the three buildings on Wabash avenue, just north of the annex, were included. In 1901 the two north buildings on State street, together with the old Central Music Hall, were torn down, and in their places there was erected a twelve-story building of steel and granite. This gave the retail business possession of about seven-eighths of the block bounded by State, Washington and Randolph streets and Wabash avenue. In 1905 the three old buildings on Wabash avenue, north of the Annex, were torn down to make room for the erection of a new twelve-story building, similar to the new portion of the State street building.

The great wholesale department of Marshall Field & Company occupies the block bounded by Adams, Quincy, Franklin and Fifth avenue, and bears the distinction of being the "largest wholesale dry goods store in the world." In addition to this there are seven warehouses, the floor space of which is nearly equivalent to the area of the retail premises. The wholesale house is of massive granite construction and though it follows none of the popular models for mercantile structures, it is considered one of the best specimens of commercial architecture in the country.

In 1881 Mr. Levi Z. Leiter retired from the firm and the house became known as Marshall Field & Company, which name has been unchanged for a quarter of a century.

Marshall Field has given unostentatiously to many public institutions in Chicago. The most notable of his benefactions is his endowment of one million dollars to the Field Columbian Museum. In 1893, toward the close of the Columbian Exposition, the movement was started to preserve the many priceless exhibits of scientific, historical and artistic curios which were being donated to the city by the exhibitors at the Fair, as a nucleus for a public museum. The enterprise was still in a formative state when Mr. Field came forward with his princely donation as an endowment. In recognition of this act the new institution was named the Field Columbian Museum and it has been rapidly taking a high rank among similar institutions of the world. The Fine Arts building of the World's Fair was left in Jackson Park as a temporary home for the museum and the enterprise organized. Since then Mr. Field has announced that he was ready to furnish the necessary funds for the erection of a permanent museum building as soon as the site could be provided for it in the extension of Grant Park on the Lake Front. This extension to the park is being rapidly filled in and the erection of a magnificent museum is now the question of only a few years. Mr. Field has also given liberally to the University of Chicago.

That Mr. Field still cherishes his New England associations is manifest in the Memorial library which he has erected in the village of Conway, Massachusetts, where he was born, in honor of his parents, John and Fidelia (Nash) Field. Mr. Field was married to Miss Nannie Douglass Scott of Ironton, Ohio, January 3, 1863. He has had two children, a son, Marshall Field, Jr., recently deceased, and a daughter, Mrs. David Beatty, who makes her home in England. He is a member of the Presbyterian Church.

Morris Selz, head of the great shoe manufacturing firm of Selz, Schwab & Co., was born in Germany in 1826. He came to the United States at the age of seventeen, with a total capital of $15, and his first business undertaking was as a traveling retail merchant, carrying his stock with him.

A little later he was employed as a salesman by a house in Hartford, Connecticut. From there Mr. Selz went South, to work in a general store in Georgia; and after a little time there he started for the gold fields of California, by way of Panama.

After several years on the Pacific Coast, Mr. Selz came to Chicago in 1854, and engaged in various small undertakings until 1871, when he invested all his capital and savings in the boot and shoe business. The establishment was a small one, occupying about half of what is now one of the firm's lesser factories. It had a daily capacity of about three hundred pairs. The business was chiefly the making of boots, and the boots were so good that they soon gained a great reputation all through the West; a reputation which still continues. In many localities "Selz boots" are still considered the standard of good quality, although the making of boots has become a minor feature of the business.

In 1878 the firm became Selz, Schwab & Co., and it

was incorporated in 1890. The firm now operates seven large factories, with a daily capacity of 20,000 pairs; employs 100 traveling salesmen, 160 office and house employees, and more than 2,000 operatives. These factories produce all kinds of footwear, from the finest dress shoe for men and women to the heaviest mining or work shoe. The firm has also a rubber mill, making rubber footwear of all kinds.

The prominent characteristic of Mr. Selz as a business man has shown all through his business life, and is the main idea in his business to-day. "Make nothing but good goods. Make the name Selz on a shoe the sign and mark of good quality; whenever anyone puts

MORRIS SELZ.

his confidence and his money in goods bearing that name let him be sure of getting his full money's worth; and a little more if possible."

Upon these principles his business has become the largest producer of good shoes in the world.

Gage Brothers & Company, Chicago's largest and foremost wholesale millinery establishment, occupies the magnificent twelve-story building at 129-131 Michigan avenue, where it has been located since 1899. The business is an old one, having been founded in 1856 by Seth Gage and John N. Gage. The concern has since, however, passed into the hands of a stock company, of which Frederick Bode is the president, George Ebeling, the vice-president, and Geo. H. Hovey, the secretary and treasurer.

A visit to the establishment as it is to-day reveals the magnitude and class of the business. The Gage building is a handsome structure of stone and brick, facing towards the Lake Front. The building was originally eight stories, but it was found necessary to add four more floors in 1902, since which the house has achieved the reputation of being the largest importers in America, and having the most complete stock of millinery merchandise ever displayed under one roof. The

GAGE BROTHERS & COMPANY'S BUILDING.

first floor of the establishment is devoted to the reception room, general offices and the ribbon and yard goods departments. On the second floor are the street and outing hats, with special display rooms. The third floor is given over to untrimmed hats. This floor is particularly interesting, showing as it does the foundations which later become elaborate creations. On the

fourth floor are exhibited the flowers and feathers. This floor is a panorama of color. The fifth floor is occupied by the lace, ornament, millinery, notion and novelty departments. The pattern hat department, with special display rooms, is on the sixth floor. On the seventh floor is the tailored hat department with display rooms, with its large varied assortment. The factory itself, the most interesting part of the establishment, covers the eighth floor. The ninth and tenth are used for packing, shipping, casing and basketing, the eleventh is devoted to the reserve stock, while the top floor is used for miscellaneous purposes. The advertising department, naturally an important feature of the business, and the editorial rooms of The Gage, a quarterly publication issued by the firm, are on this floor.

A fair notion of the methods and policy which have brought the house to its present prominent position can be derived from the pages of The Gage. It is well edited and finely illustrated, and its make-up, in general attractiveness, is superior to that of a majority of the magazines of the day. It editorially lays stress upon the fact that Gage Brothers & Company are the largest importers in the country and as a result offer decided advantages to the trade. In point of fact the house sets fashions rather than follows them. Every day hundreds of new styles and creations are produced in the Gage factory. The house employs the best talent in the way of designers and makers that money can procure. The two elements to be observed in millinery manufacture are material and workmanship; both these phases are developed to the highest degree of perfection in the Gage establishment. They give the "Gage hat" a certain prestige or class that is denied the inferior article. One word expresses the Gage business slogan—"quality."

Spaulding & Co. The house of Spaulding & Co., jewelers, was established and incorporated in 1888. Mr. Henry A. Spaulding, one of the founders, and the first president of the company, had for years been prominently identified with the jewelry house of Tiffany & Co. in Paris. He, together with a party of gentlemen, including Levi Z. Leiter and Edward Forman, of Chicago; Edward Holbrook of New York; E. J. Smith, then of Detroit, and George St. Amant of Paris, organized and established the present well-known house. The business was incorporated with a paid-in capital of $500,000, and the following officers chosen: Henry A. Spaulding, president; Edward Forman, secretary, and Edward Holbrook, treasurer. These were all men of business experience and ability, and all thoroughly informed in the special departments to which they gave their attention. Mr. Lloyd Milnor of New York became treasurer in 1890 and president in 1896, succeeding Mr. Holbrook, who had been chosen to that office in 1894. Edward Forman died April 14, 1898, and Mr. E. J. Smith was made secretary.

Within a short time it was demonstrated that Chicago could support such an establishment as it was the intention of the promoters to make it, and soon Spaulding & Co. became recognized as the leading jewelry house of the West. Located on the southeast corner of State street and Jackson boulevard, the company occupies a six-story-and-basement building, two floors of which, each with a space of 147x40 feet, are utilized as salesrooms. On the upper floors are the manufacturing departments, and here all of the diamond mountings are made, and the special designs in gold and

SPAULDING & CO.'S BUILDING.

silverware, for which the house has established such a wide reputation. There is also a very complete stationery department, and everything connected therewith, including embossing, is done in the building. The main floor is devoted to the sale of jewelry, diamonds, silverware, gold and silver mounted leather goods, stationery and a full line of English hall and mantel clocks. On the second floor is to be found the art department, where everything in the way of statuary, bronzes, rich cut-glass and costly bric-a-brac are gathered in picturesque display. Throughout the entire building one is impressed with the taste shown in the furnishings, as well as the artistic arrangements, making it one of the best-appointed shops of its kind in the world.

Spaulding & Co. also maintain a branch establishment in Paris at 36 Avenue de l'Opera, said to be the most conspicuous American addition to that city in the way of adornment and trade. The showrooms are handsomely decorated in white and gold, and the "evening room," draped in black velvet, like the "gem boudoir" of the Chcago house, is of special interest to the large number of visitors who throng the place. The Paris house is of special value in connection with the American house, as it enables them to secure all the newest Parisian novelties as they make their appearance. And in this regard it may be said that Chicago, with its close proximity to the mineral wealth of the great Northwest, is rapidly becoming the center of the jewelry trade of the country.

The E. L. Mansure Company, the leading upholstery and drapery concern in Chicago, was established in 1890, with small quarters at 45 Randolph street. The advancement in the business was rapid from the outset; in 1900 they removed to their present quarters at 74-76-78 Michigan avenue. The company occupies the entire seven floors and basement, the largest establishment devoted exclusively to their line of business in the West. The building houses the offices, salesrooms, stockrooms and manufactories of the company. On the first floor are the offices, shipping rooms, show and receiving rooms, etc. The second floor is devoted to the finishing department, where 150 girls are employed. Here is done the measuring and inspecting and various details are smoothed over and the goods are made ready for shipping. The matching and stock departments are on the third floor. Here the colors are matched and goods selected. The fourth and fifth floors are devoted to the manufacture of cord, cotton and silk, respectively, requiring dozens of spinning machines of the latest models. The hand looms are on the sixth floor; here are employed scores of workmen skilled in their craft. They do the difficult work, such as the manufacture of special pieces of draperies, fringe, etc. The large power looms are on the seventh floor; these machines turn out the larger pieces of thirty-six and seventy-two yards. The basement of the building shelters all the raw materials employed in the manufacture of the firm's finished products. Here are stored bales on bales of cotton and bags of worsted. On every floor is a fireproof vault in which is stored the silk, which comes in large skeins. These are extremely valuable and extra precautions are taken to guard them against being spoiled or destroyed. Altogether over 500 people are employed in the establishment. The firm's

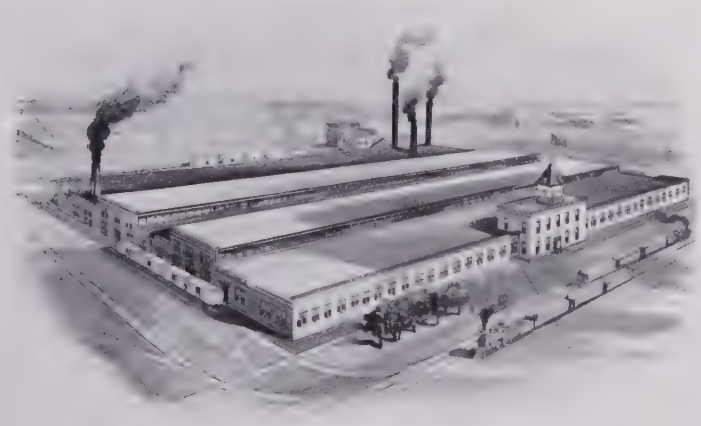
THE E. L. MANSURE COMPANY'S BUILDING.

machinery and equipment are of the most improved models. The company has a branch factory in Philadelphia, smaller than the local plant, to accommodate the eastern trade and help out the local people in rush orders, and turn out special work. They also have a New York sales office in the Hartford building.

The company's trade extends over the United States and Canada. They both make draperies, upholstery, fringes, portières and similar household equipment of their own designs, and according to special orders. Carl Weilert, designer of their embroideries, is the cleverest man in his line in the country. Mansure's work has always been artistic, though utility has not been overlooked.

Mr. E. L. Mansure, founder of the business, has been its president since its establishment. He was associated with the drapery business many years previous. H. F. Walliser is vice-president, P. R. Rudhart is secretary, and John H. Van Arsdale, treasurer.

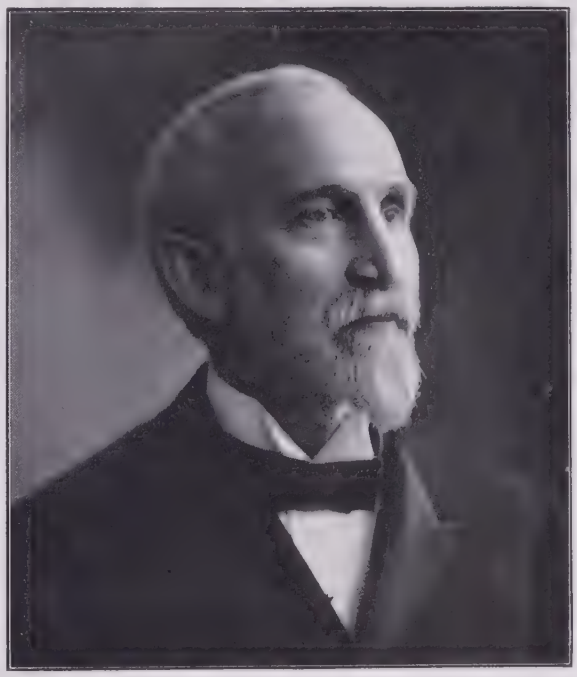
George M. Clark & Company has been a leading name in the stove manufacturing business for the past twenty-four years. The firm was founded by George M. Clark in 1881, and since then has made rapid progress. The home offices are at 72 Lake street. The firm has made a specialty of the manufacture of gasoline and gas stove ranges and appliances, known as the "Jewel." The growth of the business necessitated the removal of the factory in 1897 to Harvey, Illinois, where four hundred hands are employed. In 1902 the business was merged, with other companies, in the American Stove



GEORGE M. CLARK & COMPANY'S PLANT.

Company, of which Mr. Clark became first vice-president and general manager of the George M. Clark Company division.

George Mark Clark was born at Westminster, Vermont, June 10, 1841, the son of Mark and Sarah (Hall) Clark. Mr. Clark received his education in the public school at Westminster. He began his business life in a general merchandise store in Brattleboro, Vermont, where he lived from 1858 to 1864. The opportunities of the West tempted him to come to Chicago in 1864. He accepted a position with Jessup, Kennedy & Company, which firm afterward became Crerar, Adams & Company, manufacturers of railway supplies. Mr. Clark



GEORGE M. CLARK.

soon became superintendent of the works. In 1874 the Adams-Westlake Manufacturing Company was incorporated, taking over the manufacturing interest of Crerar, Adams & Company. Mr. Clark was made superintendent of the new corporation, which position he held until 1885. In 1881 Mr. Clark, with Mr. Adams, started a new company for manufacturing gasoline and vapor stoves, incorporating same under the name of Myers Manufacturing Company. In 1886 the name was changed to George M. Clark & Company.

Mr. Clark was married to Miss Elizabeth M. Keep at Oberlin, Ohio, June 18, 1872. They have two children, Alice Keep and Robert Keep. Mr. Clark is a Republican in politics and is a member of the Union League Club. The family residence is at 460 Dearborn avenue.

Moses Bensinger, the late president of the Brunswick-Balke-Collender Company, Chicago, New York and Cincinnati, with branch houses in all the principal cities of the United States, France, Germany, Canada and Mexico, was born in Louisville, Kentucky, August 17, 1839, and died October 14, 1904, in his sixty-sixth year.

Mr. Bensinger commenced his business career as a jeweler's apprentice and watchmaker, continuing in that

line until 1869, when he became identified with J. M. Brunswick, the pioneer manufacturer of billiard tables, with factories in Cincinnati and Chicago. By persistent effort and energetic push, he soon mastered the details

MOSES BENSINGER.

of the business and became the practical head of the business. Owing in a large measure to his foresight and capability as an organizer, the rival house of Julius Balke of Cincinnati and St. Louis was induced to join forces with the J. M. Brunswick Company, under the corporate name of the J. M. Brunswick & Balke Company. Mr. Bensinger, one of the partners in the new firm, assumed the management of the principal establishment in Chicago. Subsequently through Mr. Bensinger's efforts, the H. W. Collender Company of New York, which was at that time a formidable competitor, was absorbed, and the corporate name of the company changed in 1884 to its present title, The Brunswick-Balke-Collender Company.

The office of the president of the company was held in succession by J. M. Brunswick, Julius Balke and H. W. Collender. Upon the death of the latter in 1890, Mr. Bensinger was unanimously chosen for the important position, which he held until his death. The company has for many years been known as the oldest and largest manufacturers of billiard and pool tables in the world, but under Mr. Bensinger's able management the output of the concern has been increased to something more than four times that of 1890, when he took direct charge of the great establishment. He was too enterprising and energetic to rest content with a business which he considered susceptible of enlargement and improvement. He told several of the stockholders who were opposed to development that new methods, new life and vigor were essential to continued prosperity, and that without them the great business that he and the two or three other living founders of the company had built up would die out of dry rot, and disintegrate of itself.

He did not by any means have clear sailing, so to speak. There were numerous rocks and shoals, which might have brought a less skillful or less determined mariner to disaster.

Mr. Bensinger was a member of the Chicago Athletic and Standard Clubs, and was of a jovial, good-natured disposition, to which, in a measure, can probably be attributed his popularty. He was never so happy as when relating anecdotes of the good old days when he was roughing it as traveling salesman and general utility man for the company of which he was the head for a number of years.

Mr. Bensinger was married to Eleanora, one of the daughters of J. M. Brunswick, in 1865. Of his three children, B. E. Bensinger, his only son, has succeeded his father as president of the company.

Monarch Book Company. The civilized world agrees with the philosopher who suggested that we bless the man who invented books. It must be conceded, however, that he who publishes and sells books

BRUNSWICK-BALKE-COLLENDER COMPANY'S PLANT

merits equal, if not more, consideration from those who may be disposed to bestow benedictions on the members of the book craft.

The business of publishing and selling books has

made great strides during the past twenty-five years, and the Monarch Book Company has been a leader in the advance movement at all times. This concern was founded in 1882, by two college students at Beloit, Wisconsin, who shortly thereafter finished college and moved the business to Chicago, where, under able and farsighted management, it has been developed from the small beginning to the present large business institution.

LINCOLN W. WALTER.

Originally this company sold only such books as it could buy from other publishers, but its business grew so rapidly that it shortly engaged in publishing its own books, and has been for a number of years regarded as one of the leading publishing houses of the world. It was a pioneer in publishing juvenile literature and selling these books through agents during the holiday season. It is safe to say that millions of its children's books have been purchased for Christmas presents, which have been a never-ending source of amusement and instruction to the little ones. This house has always been ahead of its competitors in introducing new features, with the result that its books have been made more attractive from year to year. Besides children's books, its list of publications includes historical, biographical, religious, educational and works of reference. The Monarch Book Company has from the beginning employed the best authors obtainable, and its list of writers contains the names of the most famous men and women in literature of the last quarter of a century. Among these are the Rev. Frank W. Gunsaulus, president of Armour Institute of Technology, the Rev. Samuel Fallows, the Rev. J. J. McGovern, Theodore Roosevelt, William McKinley, Grover Cleveland, Henry Cabot Lodge, George William Curtis, George F. Hoar, James Bryce, James Cardinal Gibbons, Seymour Eaton, Dr. Henry Hopkins, president of Williams College; David Starr Jordan, president of Leland Stanford University; Hon. Murat Halstead, Edward S. Ellis, Dr. John Lord, Evelyn H. Walker, Anna A. Gordon, Opie Read, Press Woodruff, Samuel L. Clemens, the Rev. J. S. Kirtley and many other eminent scholars and writers equally well known.

The Monarch Book Company has always enjoyed the esteem of the public because of its sterling honesty and fair dealing, and its strong financial condition is due to the fact that its publications have invariably been successful, many of them reaching enormous sales in a short space of time. Of the Life of McKinley over 750,000 copies were sold in less than four months after his death. Several hundred thousand Bibles, both family and teacher's editions, have been sold. Enormous sums in royalties have been paid to the authors. The W. C. T. U., through Anna A. Gordon, received over $24,000 royalty from the sale of the Life of Frances E. Willard. The Monarch Standard Atlas and Illustrated World is a monumental work and its sale has reached over 300,000 copies. Barnes' Bible Encyclopedia in three volumes and the History and Government of the United States in six volumes have been but recently issued and are already in great demand.

GORDON G. SAPP.

To properly market its great output, this company employs hundreds of travelers, who visit every section

of the country several times each year, and thousands of local agents. The management early adopted the policy of rewarding faithful work by advancement, and the result is that to-day every department is in charge of

WILLIAM H. RIDER.

thoroughly experienced and competent managers, and the grand success of the house is due, in no small degree, to the hearty and efficient co-operation of its army of workers.

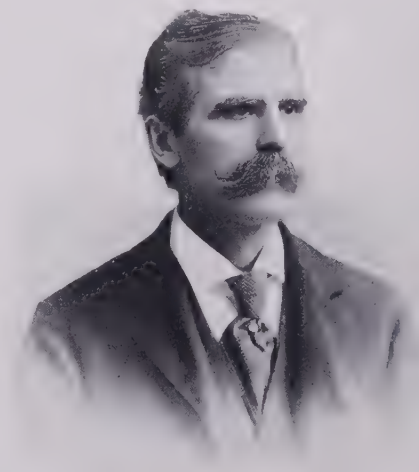
The main office in Chicago and the branch office in Philadelphia are veritable hives of industry. The officers of the Monarch Book Company are: Lincoln W. Walter, president and treasurer; Gordon G. Sapp, vice-president, and William H. Rider, secretary and general manager. These gentlemen also constitute the board of directors.

The Blakely Printing Company. In 1898, when the Stereotypers' union marched out in a body and the Chicago newspapers were compelled to suspend publication, at a time when the public thirsted for news of the Spanish-American War, it remained for an enterprising printing firm, The Blakely Printing Company, to fill in the gap and supply the public with a newspaper that contained complete and authentic intelligence. It will be remembered that the Chicago papers did not appear on July 2, at the time when Shafter was knocking at Santiago's gates and an encounter between Schley's and Cervera's naval forces was hourly expected. C. F. Blakely, vice-president of The Blakely Printing Company, 126-132 Market street, and W. M. Knox, president of the Press Club, heard of the walk-out, and decided to supply the deficiency. The Blakely Company had all the necessary facilities, presses, etc. Knox organized his "staff" at three in the morning, and offices were established at Blakely's. Telegraphic service was secured; at eight in the morning the presses started, and in five minutes the sheet was on the street. It was a four-page affair, as large as the Inter-Ocean. It contained not merely the latest war news, with full details of the American victories in Cuba, but all the current news, even including the base-ball scores. The paper's circulation the first day reached 40,000; on the fourth it sold 1,000,000 copies. The publication was suspended as soon as the dailies resumed issue. The projectors pocketed a handsome profit and a handsomer reputation for enterprise and push.

The Blakely Printing Company, among the oldest concerns of its kind in Chicago, was established in 1871 on Green street, near Randolph street, on the West Side, since which time they have grown to be one of the largest and most modern equipped printing houses in the West. They are now located at 126-132 Market street, occupying a large portion of the front and rear buildings.

Their plant is in operation both day and night, employing a large force of the most skilled and intelligent workmen.

The company has a reputation for turning out high-class work. This volume is a product of their press-



C. F. BLAKELY.

rooms. Their most worthy pieces of work were the two volumes "The Book of The Fair" and "The Book of Wealth." The latter was the most expensive modern book ever published. The edition de luxe was limited; each volume sold for $2,500. W. K. Vanderbilt, J. Pier-

pont Morgan, Alva E. Belmont, Caroline Astor, J. J. Astor and Helen Gould were among the subscribers.

Mrs. David Blakely is president of the company; C. F. Blakely, vice-president and founder, is its active head. J. I. Oswald, secretary and manager, has been associated with the concern for twenty-five years; Hawley Olmstead, the treasurer, has been with them for the last fifteen years.

Peter Reinberg, alderman of the Twenty-sixth ward, whose florist establishment is the largest in the world, was born on a farm at Rosehill in 1858. His father had settled on a thirty-two-acre tract there ten years previous, when only Indian roads stretched through the forests in the direction of Chicago.

While a boy, Alderman Reinberg attended the rural schools about his home and herded cattle in the district now known as Ravenswood. As Chicago grew vegetable raising became profitable and he was engaged in this pursuit on his father's farm until 1887, when he laid the foundation of his great flower industry by building his first greenhouses. These were very small affairs in comparison with the ones which he now puts up a block at a time.

For the first two years, Mr. Reinberg grew lettuce and cucumbers in his greenhouses. With an addition of four more greenhouses he then turned his attention from truck gardening to growing roses and carnations. He has kept adding to these greenhouses until the present time when his greenhouse property aggregates 1,200,000 square feet of glass, the largest in the world.

Alderman Reinberg regards the flower habit as contagious and his endeavor has been constantly to educate the public to an appreciation of his products. There are times in the year when the flower market is dull and when prices are extremely low. Most florists are then disposed to gather their blooms and dump them as waste fertilizing material. This is not so with Mr. Reinberg, however. His philosophy has been to

PETER REINBERG.

market the flowers regardless of the prices they bring. The working of this theory is seen in the rapidly increasing use of flowers in Chicago.

"Where flowers are brought into a house because they are cheap at some particular season," he says, "these same flowers are likely to find their way into

SECTIONAL VIEW OF PETER REINBERG'S PLANT.

the home when they cost a great deal more. There is no doubt that the per capita consumption of flowers has increased greatly and that it is still growing."

Ordinarily when a visitor sees the twenty-six acres of Mr. Reinberg's plant under glass, he wonders about the cost of the glass. As a matter of fact the glass represents only about one-seventh of the cost of a greenhouse establishment. The framework for the glass, the benches for the plants, the steam piping for heating and even the ventilating apparatus by which all of the windows may be opened simultaneously by the turning of a ratchet wheel, are all expensive items. Mr. Reinberg's establishment represents an investment of nearly one million dollars. In the last year the steam plants at his greenhouses have consumed more than 12,000 tons of coal. The main offices of his greenhouses are at 3468 Robey street.

Until the spring of 1904 Mr. Reinberg was interested in politics only as a looker-on. He had persistently refused to run for office. The mayor and sheriff then persuaded him to run for alderman. Although his ward is normally republican by 1,500, he swept the ward on the democratic ticket with a plurality of 2,293.

Brock & Rankin. The edition book business of Brock & Rankin was established in 1892, the firm occupying quarters at 327 Dearborn street. From its inception the growth of the business was rapid and a year later they moved into larger quarters at 87 Plymouth place. In 1897 they removed to 155 Plymouth place, the increase in business again necessitating a change. Finally, in 1902, they erected their present establishment at 383 La Salle street to accommodate the needs of the concern. It is a modern fireproof seven-story structure, of which four floors are devoted exclusively to their printing and binding business. They have 70,000 square feet of floor space, and their equipment represents the very latest developments in composition, printing and binding machinery. They employ 250 people in their plant.

A. J. BROCK.

CHARLES W. RANKIN.

Their business embraces the composition, printing and binding of books, catalogues, encyclopedias, histories, fiction, et al. They do a very large amount of school book work, supplying as they do school books in over half the states in the Union. Their work is of the highest quality; this volume is a product of their binding department.

The two members of the firm are A. J. Brock and Charles W. Rankin, both of whom are men who have been identified with Chicago's business growth for thirty years, during which time they have both been connected with the printing and book business. They have contributed their share towards developing the printing and binding industry in Chicago. Some idea of its expansion can be gained from the fact that Brock & Rankin's present plant has a capacity twice that of all the Chicago plants of thirty years ago combined.

Chicago Edison Company. Climatic and commercial conditions peculiarly favorable to the manifold applications of electric current for power and lighting purposes, together with the remarkable growth of the city within the last decade, have made Chicago one

of the foremost electrical centers of the country. The prevailing fogs of the winter season, aggravated by the "smoke nuisance" and intensified by the lofty office buildings and narrow streets of the down-town district, necessitate the use of a tremendous amount of artificial illumination, and this demand has been greatly augmented during recent years by the almost universal acceptance of electricity as the most efficient and desirable medium for residential, store and sign lighting and as the most flexible and economical form of applied power.

SECTIONAL VIEW OF THE CHICAGO EDISON COMPANY'S WORKS.

The development of this important industry in Chicago is largely due to the Chicago Edison Company. Incorporated in April, 1887, as an outgrowth of the old Western Edison Electric Light Company, its first central station, located at 139 Adams street, was placed in commission in August, 1888, with a total capacity of about 50,000 lights and a connected business of 16,800 sixteen candlepower equivalent, contracts for which had been secured during the erection of the plant.

The growth of business was rapid, and within three years the Adams Street station, in which it was thought that ample provision had been made for future expansion, became heavily overloaded, thus necessitating the erection of a larger plant. This need was increased by consolidation with several other companies, the largest of which was the Chicago Arc Light and Power Company, operating a high-tension arc lighting plant at Washington street and the river. Land was accordingly purchased on the west bank of the Chicago river at Harrison street, and plans were prepared for what then seemed an immense plant, equipped with the most modern apparatus, laid out in accordance with the latest ideas in central station construction and designed to take care of the anticipated increase in business for the next decade. The Harrison Street station was completed in August, 1894, when the entire load of the Adams Street station was transferred to the new plant, the station at 139 Adams street being permanently shut down.

It did not seem practicable to raise all the feeders which had formerly centered at the Adams Street plant, and it was therefore decided to connect the Harrison Street station to 139 Adams street by an immense trunk line capable of carrying several

times the amount of current turned out by the old station, which thereby became the "center of distribution." As soon as the trunk line was completed the building at 139 Adams street was reconstructed to accommodate the company's general offices and some of its operating departments.

In the meantime a demand had sprung up in the southern residence section of the city and to meet this a station was built on Wabash avenue just south of Twenty-sixth street and a new system of conductors reaching nearly to that of the down-town system, was laid in the streets. In 1894 a corresponding station was erected for the northern residence district, located at Clark and Ohio streets, for the purpose of supplying the territory bounded by the river, North avenue and the lake.

The original installation at Harrison street was kept in service from 1894 to 1897, after which, during another period of rapid expansion from 1897 to 1902 this plant was also developed to the full extent permitted by the property, while the Washington Street station (acquired from the Chicago Arc Light & Power Company) was likewise developed to the limit of its capacity.

In 1897 the advance of the science made it commercially possible to transmit high potential current and to convert the same current to lower voltages for distribution over existing low-tension lines, whereupon the first three-phase transmission line at 2,300 volts (which one year later was raised to 4,500 volts) was installed to supply alternating current to rotary converters located in the Twenty-seventh Street station. These machines and the auxiliary step-down transformer received high potential alternating current and delivered direct current to the low-tension distributing system.

The larger area which could now be economically supplied from a single large station gave a great impetus to sub-station development, and the transmission voltage was raised to 9,000 volts. The smaller generating plants were gradually converted into rotary sub-stations with auxiliary steam reserve, while Harrison Street station was equipped with larger units ranging up to 3,500 kilowatts, to take care of the constantly growing demand.

In order to supplement its central station capacity during the period of maximum load, and as an additional safeguard against possible interruption of service the company decided to install a huge storage battery in the basement of 139 Adams street, the installation of which was completed in May, 1898. In October, 1899, a second battery was placed in the same building and two years later a third was installed, thus insuring the utmost possible protection to the company's customers in the event of trouble at the generating stations.

The changes occasioned by gradual betterment of the service have involved amongst other improvements the substitution of direct current constant potential arc lighting for the old series arc system and the abolition of 500 volt power, this having been superseded by 220-volt service.

At the present time the Chicago Edison Company operates one large generating station, three subsidiary steam plants which are operated the greater part of the year as sub-stations, and eighteen other sub-stations for direct current distribution to the company's customers, a number of these sub-stations being equipped with storage batteries in addition to the converting apparatus, while four of them are storage battery sub-stations pure and simple, their sole function being the accumulation of a reserve supply of energy to supplement the direct supply to the distribution system during the period of heavy load.

The company has been remarkably successful in displacing isolated plants with its central station service, and practically all of the larger stores, clubs, office buildings and hotels are now supplied with light and power by the Edison company. The development of its power business has also increased very rapidly during the last few years as the economical possibilities of small direct-connected motor installations are becoming more widely understood and appreciated. Some idea of the company's growth may be derived from a comparison of its present connected business with that of ten years ago.

Light.

Fiscal year ending 1894.....183,400 16 candlepower
Fiscal year ending 1905.....775,900 16 candlepower

Power.

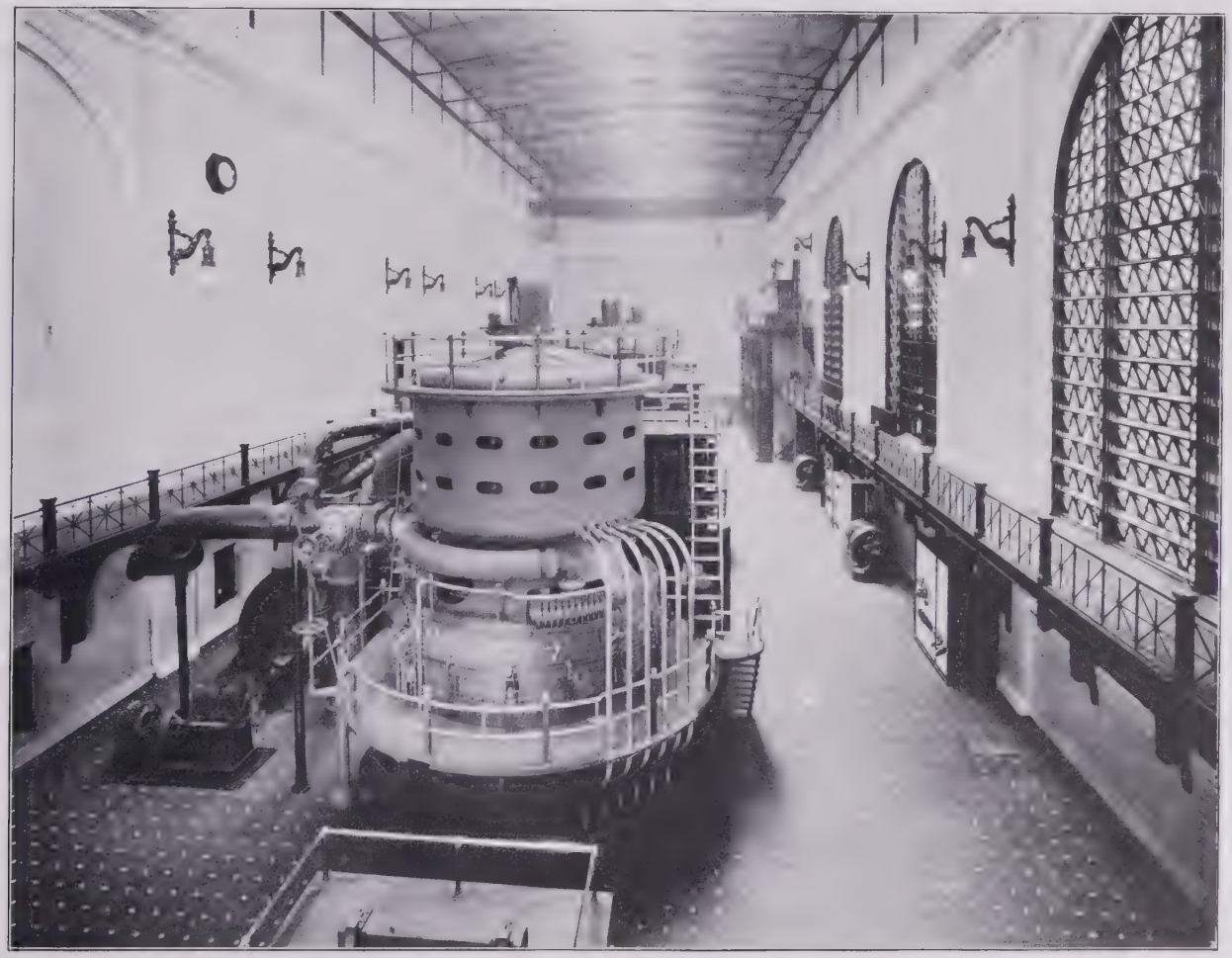
Fiscal year ending 1894..... 3,600 horsepower
Fiscal year ending 1905.....55,000 horsepower

The officers of the company are: Samuel Insull, president; Robert T. Lincoln, first vice-president; Louis A. Ferguson, second vice-president; William A. Fox, secretary and treasurer; Robert L. Elliott, assistant secretary; John H. Gulick, auditor.

Commonwealth Electric Company. About the year 1889, in the small towns then existing around Chicago, which have now become a part of the city, a number of small companies or individuals almost simultaneously obtained franchises for the erection of poles for systems of electrical distribution in the various sections, and small lighting businesses were started. Many of these districts overlapped each other, and all were in contact with competitors, so that 1896 found no less than ten small companies operating in what had now become the new portion of the city.

Most of these properties were not very profitable to the holders of their securities, and some were hardly able to pay their bond interest. Continuous requirements for additional investment for extensions, taken perforce from earnings, and a ruinous competition had seriously interfered with the success which promised at the time of their establishment. About this time certain gentlemen of discriminating judgment in the matter of lighting fields and of wide experience in the electric lighting business generally, controlling ample means of financing any proposition which received their endorsement, began the movement which, in 1898, resulted in the purchase of all the companies by a corporation formed at that time, named the Commonwealth Electric Company. This company was possessed of a broad and liberal franchise for the installation and operation of underground systems of conductors for the distribution of electricity in the finer portion of the old city, and pole line systems in the balance of the old city and all of the new city. The following plants were thus consolidated: People's Electric Light & Motor Power Company, People's Electric Light & Power Company, Hyde Park Thomson-Houston Light Company, Hyde Park Electric Company, Englewood Electric Company, Mutual Electric Light Company, West Chicago Light & Power Company, Western Light & Power Company, Edgewater Light Company, and Miller Electric Light Company.

The new company found itself the owner of a heterogeneous assortment of plants and systems, supplying various kinds of electric energy over a district comprising about one hundred square miles of territory. As soon as conditions would permit, a number of the less important plants in the southern district were shut down and their business transferred to several of the larger plants acquired by the consolidation. A little later, the several inherited systems of varying pressures and frequencies having meanwhile been standardized and inter-connected, these remaining stations were in turn superseded by a large and modern 60-cycle polyphase generating plant which the Commonwealth Company erected at Fifty-sixth and Wallace streets and which was placed in operation in the latter part of 1900. The original capacity of the station was 1,400



SECTIONAL VIEW OF THE COMMONWEALTH ELECTRIC COMPANY'S WORKS.

kilowatts, but this was increased to 2,400 kilowatts during the following year. The output of this station is distributed by means of a 3-phase, 4-wire, 2,300-4,000-volt, 60-cycle overhead system of primary distribution, with 115-230-volt single-phase secondary for lighting, and 220-volt, 3-phase current for power service, supplying practically all of the southern residential district. About a year after the completion of the Fifty-sixth Street station, the plant of the old Western Light & Power Company (now known as the Lake View station) was rearranged for 3-phase, 60-cycle distribution. Thereupon ensued an era of sub-station development with 25-cycle, 9,000-volt transmission from the generating stations. The economic necessity for one great generating center, however, soon became apparent, and the ultimate relegation of both the Fifty-sixth Street and Lake View stations to the subordinate position of subsidiary steam plants was determined upon when plans were prepared for the imposing Fisk Street station. The building of this vast plant, one section of which was completed and put in operation in September, 1903, marked the advent of the large vertical steam turbine in central station service, and as far as Chicago was concerned, the gradual conversion of 60-cycle generating plants into sub-stations equipped with frequency-changing apparatus fed by an interconnected system of 25-cycle transmission lines from the Fisk Street station. This station is located at the junction of Fisk street and the south branch of the Chicago river, about three miles from the center of the down-town business district. It stands in the center of a 23-acre plat of land, and the building, as at present constructed, consists of the boiler house, 190 by 165 feet, the turbine house, 225 by 65 feet, both of steel construction, and the separate switch house, 140 by 50 feet. These structures are designed for future expansion to three and one-half times the present capacity. Of the French style of architecture, with red pressed brick walls and cut stone trimmings, they form a pleasant contrast to the ordinary river front property.

The present installation consists of three complete units, consisting of coal conveyors, boilers, Curtis turbo-generators, steam and electrical auxiliaries and switching apparatus, having a total capacity of 18,000 kilowatts. A fourth unit is nearly completed, and the fifth and sixth are under way. The ultimate installation contemplates fourteen units, with an aggregate capacity of over 100,000 kilowatts.

The growth of the company's business during the last seven years is shown by the following comparison:

	Light. 16 cp. equivalent.	Power. horse power.
Fiscal year ending March 31, 1899	130,700	350
Fiscal year ending March 31, 1905	553,400	11,700

The executive offices of the company are located in the Edison building, 139 Adams street, and its officers are: Samuel Insull, president; Robert T. Lincoln, first vice-president; Louis A. Ferguson, second vice-president; William A. Fox, secretary and treasurer; Robert L. Elliott, assistant secretary; John H. Gulick, auditor.

The People's Gas Light & Coke Company was organized under special perpetual charter by act of the Legislature of Illinois February 15, 1855, amended February 7, 1865, to carry on the business of furnishing gas and its bi-products in the city of Chicago and vicinity. August 2, 1897, the Chicago Gas Light & Coke Company, the Consumers' Gas Company, the Equitable Gas Light & Fuel Company, the Suburban Gas Com-

PEOPLE'S GAS LIGHT & COKE COMPANY'S BUILDING.

pany, the Lake Gas Company, the Illinois Light, Heat & Power Company and the Chicago Economic Fuel Gas Company became merged into the People's Gas Light & Coke Company, so as to form a single corporation, pursuant to the laws of Illinois. The above-named companies have ceased to exist, and their capital stock was canceled at the time the People's company increased its capital to $25,000,000.

The officers of the People's Gas Light & Coke Company are: Chairman of the Board, C. K. G. Billings; President, George O. Knapp; Vice-President, Anthony N. Brady; Second Vice-President, Walton Ferguson; Third Vice-President, C. K. Wooster; Secretary, L. A. Wiley; Assistant Secretary, H. W. Wolcott; Second Assistant Secretary and Treasurer, F. A. Crane; Treasurer, W. S. McCrea; Assistant Treasurer, J. S. Zimmerman. Directors: C. K. G. Billings, A. N. Brady, Walton Ferguson, A. R. Fowler, George O. Knapp.

The capital stock of the People's Gas Light & Coke Company has been increased to $35,000,000, authorized in shares of the par value of $100 each, of which $32,969,100 is outstanding. Bonds to the amount of $34,496,000 are outstanding.

The supreme court of Illinois recently sustained the constitutionality of the act of the General Assembly passed in 1897, under which this company acquired the properties of several other companies theretofore engaged in manufacturing and distributing gas in Chicago. The company was successful in the court below, and the state appealed to the supreme court, which in a very full and elaborate opinion held the act of 1897 to be constitutional, and not subject to any of the attacks made upon it by the state. More recently the United States Circuit court for the Northern District of Illinois held that the city of Chicago did not have the legal power to pass an ordinance to fix the price of gas, and that the ordinance adopted by the city council in October, 1900, in force January 1, 1901, whereby the city sought to compel the People's Gas Light & Coke Company to sell gas for 75 cents per thousand cubic feet, was invalid and void, and an injunction restraining the enforcement of that ordinance was ordered.

The Ogden Gas Company was organized in 1895, when a construction company was created, called the Western Republic Construction Company. Its directors were Thomas Gahan, E. R. Brainard, A. J. Graham, Roger C. Sullivan, Jacob Franks. Thomas Gahan was president; E. R. Brainard, vice-president, and Roger C. Sullivan, secretary and treasurer. Application for a permit under the city ordinances was made in March, 1896, but construction operations were not begun until some time thereafter. The plant, having a capacity of about 1,000,000 feet a day, was erected between Hawthorne avenue and the north branch of the Chicago river, near the tracks of the Chicago, Milwaukee & St. Paul Railroad, and twenty-two miles of mains were laid in the North Side. The present capacity of the plant is between four and five million cubic feet per day, and the mileage of mains has been more than trebled.

The company has an authorized capital of $10,000,000, of which only $5,000,000 has been issued. It has $6,000,000 45-year 5 per cent gold bonds outstanding.

Present directors: John R. Walsh, John M. Smyth, John A. Spoor, Thomas Gahan, Roger C. Sullivan.

Officers: Acting president, secretary and treasurer, Roger C. Sullivan; general manager, T. V. Purcell.

The Ogden Gas Company is now doing the largest business it has ever done during the history of the company. While its street mains have not been extended to any considerable extent the company has found all it could possibly do to meet the constantly increasing demands of new consumers along the line of mains heretofore laid. With all the new machinery and apparatus installed during the previous years, it has been able to meet every demand. The general public has shown beyond all question that it fully appreciates the fact this company has given them the 90-cent rate, while before its coming no rate lower than $1.00 had ever been known.

One of the important departments of this company and one that has been of material help to patrons, is the supply house at 653 North Clark street, where every appliance in the way of gas ranges, piping and fixtures, arc lights, water distillers, etc., which may be paid for in cash or bought on the easy payment plan, are available.

The main offices of the company are located at 115 Dearborn street. The Ogden Gas Company, unlike some private corporations, has always acted with a lively sense of the rights of the public. "Make the service better and better" is the constant aim of the Ogden management. The company spares neither time nor money in its efforts to make its relations with the public pleasant and satisfactory. It requires all its employees to show the greatest courtesy to the public under all circumstances and in all matters. Any discourtesy in manner or in speech toward any consumer of the gas company, whether such visitor is applying for gas or paying a bill is immediately reprimanded, and repetitions of the offense result in the dismissal of the employee.

Chicago Telephone Company. When one considers the great area of the city, the tremendous amount of business transacted daily and the well-known strenuous habits of its citizens, it is not surprising to record the fact that Chicago has always been, in the amount of service required, the leading telephone city in the world. In Chicago everybody uses the telephone. There is hardly to be found a man or woman who cannot give

CHICAGO TELEPHONE COMPANY'S BUILDING.

their telephone address, representing the telephone either in their own homes or places of employment or the nearest telephone at which they can be reached. The telephone directory is the Blue Book of the city as far as business firms or residences are concerned. By means of nearly 100,000 telephones now installed in the city exchange, and 40,000 in surrounding suburban districts, the Chicago Telephone Company is affording service to the city which, in volume, has probably never been reached in any other part of the world.

In 1893, when the number of telephones in Chicago reached 10,000, the Chicago telephone exchange was the largest in the world, and by many it was thought that the limit had been about reached. Within a few years from that time, however, the ever-increasing number of telephone users began to appreciate the fact that what they wanted was not the telephone, but the telephone service or message either within the limits of a city exchange or its suburbs or the surrounding country. In New York, perhaps, there was a first appreciation of this fact, and measured service was there introduced which provided that the subscribers should pay for the service in accordance with the number of messages sent. At about the same time operating plans and apparatus were introduced making it possible for the user of a telephone to pay for his service at the time it was rendered, making the measured service a "pay as you go" proposition. The exchange in New York under these plans proceeded to grow at a phenomenal rate.

In the Chicago exchange provision was made as rapidly as possible for the offering of service on both of these plans, and immediately the exchange began a phenomenal growth, which is still under way, so that within the city exchange at the present time nearly 100,000 telephones are operated, a very large majority being on the measured service plan, and generally on what is called the "nickel-in-the-slot" basis. There were naturally a number of difficulties to be surmounted in providing apparatus which would handle nickel service, but improvements in the machinery have kept pace with the demand for the introduction of the service, and the nickel-in-the-slot telephone is extending its field of usefulness every day.

It is an attractive proposition to anyone that telephone service may be paid for at the time it is rendered, and that the payment is made by the person getting the service, so that from the smallest private residence, where, at a guaranty of five cents a day for service, it is possible to have the telephone available at all hours, up to busy offices and warehouses where it is desired that the use of the telephone shall be restricted to the necessary business of a company or firm, the pay-as-you-go instrument meets with hearty appreciation.

There are some things about the Chicago exchange which are not generally understood. Originally its limits reached only to Fullerton avenue on the North side and Thirty-ninth street on the South side. Its area has widened as the density of population has warranted construction of telephone lines in sufficient number. Now the company has extended the northern limits to reach the boundaries of Rogers Park exchange district. On the south the limits have been gradually extended year by year by the company until they now reach Seventy-ninth street, while the western boundary is about

along the line of Fortieth avenue. This territory, nearly eighteen miles long and more than five miles wide, is greater than that embraced in any other one telephone exchange, and it requires a tremendous plant in the way of exchange buildings and offices filled with switching apparatus, as well as of underground cables and wires, to furnish such a widespread service. Within the limits of this Chicago exchange there is communication at standard rates without any added toll.

It has been supposed by many that the field of operations of the Chicago Telephone Company was the city of Chicago alone. This is by no means the case. The company operates in the territory embraced in a radius of about fifty miles from Chicago, having 114 separate exchanges and seventy-six toll stations in this territory, such exchanges as Elgin, Joliet, Aurora, Oak Park, Evanston, etc., being the leading ones in the point of size. In ten of these cities the company has erected office buildings for its own use, and its plants of wires and cables is co-extensive with their limits. In addition, the company has more than 12,000 miles of toll lines, extending in a network from Chicago to each of these cities and towns, and from one to the other, making it possible to communicate by telephone at a cost ranging from 10 cents upward, according to distance.

Running into nearly all of these suburban and country exchanges are lines reaching not only the surrounding villages and towns within the various counties and townships, but also the residences of farmers, who to the number of several thousands are already furnished with telephone connection by the company and may speak from their houses not only to the nearest town or county seat, but with Chicago and the surrounding country. In some parts of the country efforts have been made to develop this farmers' line service by a cheap class of construction, stringing an indefinite number of subscribers on one wire, as many as thirty in some cases, the result being generally a demoralized service. The Chicago Telephone Company has endeavored to avoid this by providing a high class of construction and special plans of operating, by means of which as many as eight farmers are accommodated on one circuit with a minimum of interference. The natural result of such an extended and available service has been to increase very greatly the demand for it, and this has been such that it is almost impossible to keep pace with it except by a tremendous expenditure of capital and greatest effort on the part of the staff of the company.

The increase in the number of telephones during the last three years has been at the rate of 20,000 a year, and at one time was at such a rate that the company was obliged to cease all advertising and canvassing and accept such orders as were proffered subject to inevitable delay occasioned by their great number.

It is difficult to appreciate the extended scope of the service without a close inquiry into its details. Interesting features, however, are found in the fact that telephones are now installed in more than 25,000 private residences in Chicago; that in all of the leading hotels telephones are installed in every room, and equipped for city exchange or toll-line service through a private switchboard in the hotel office; that in more than 1,000 places of business, including nearly every newspaper, railway, express company, packing-house and like industry, private branch exchanges are located, a special operator being employed to handle telephone calls and trunk lines being extended to the nearest telephone exchange. In such establishments the telephone on the desk of the head of a department is just as important as the pen.

Every large department store in the city has a private exchange of this character, and nickel telephones enclosed in soundproof booths are found on every floor and in every department for the convenience of customers. One of the largest retail establishments in the city has more than 400 telephones of this kind and employs twelve operators constantly to attend to the service. In a number of the leading restaurants it is so provided that a telephone may be brought to any table, and conversation carried on directly from it. It is almost impossible to appreciate what a tremendous saving of time is accomplished by the service of such a telephone exchange. At a cost of 5 cents one may reach any one of 100,000 telephones, within an area of nearly 100 square miles, and one may provide himself with a telephone to meet the requirements of his own service on any one of the various plans necessary for such requirements, and at a cost for some classes of service as low as 5 cents a day.

The Illinois Tunnel Company owns and operates the largest tunnel system in the world. At present it stretches under the streets of Chicago for a distance of forty miles. All this has been built without accident or injury to the immense skyscrapers which tower about it in the business section of the city. When the system is completed its bores will reach on each of the three sides of the city to a distance of seven miles from the loop center.

New York, Boston, London and other cities have tunnels that are more widely known than those of the Illinois Tunnel Company. The subways of other cities are for passengers, while the tunnels of Chicago are for freight. Chicago keeps the streets for its citizens and handles its freight and heavy traffic underground. It is the pioneer city to build tunnels for this purpose and the construction work already completed is the marvel of the engineering world.

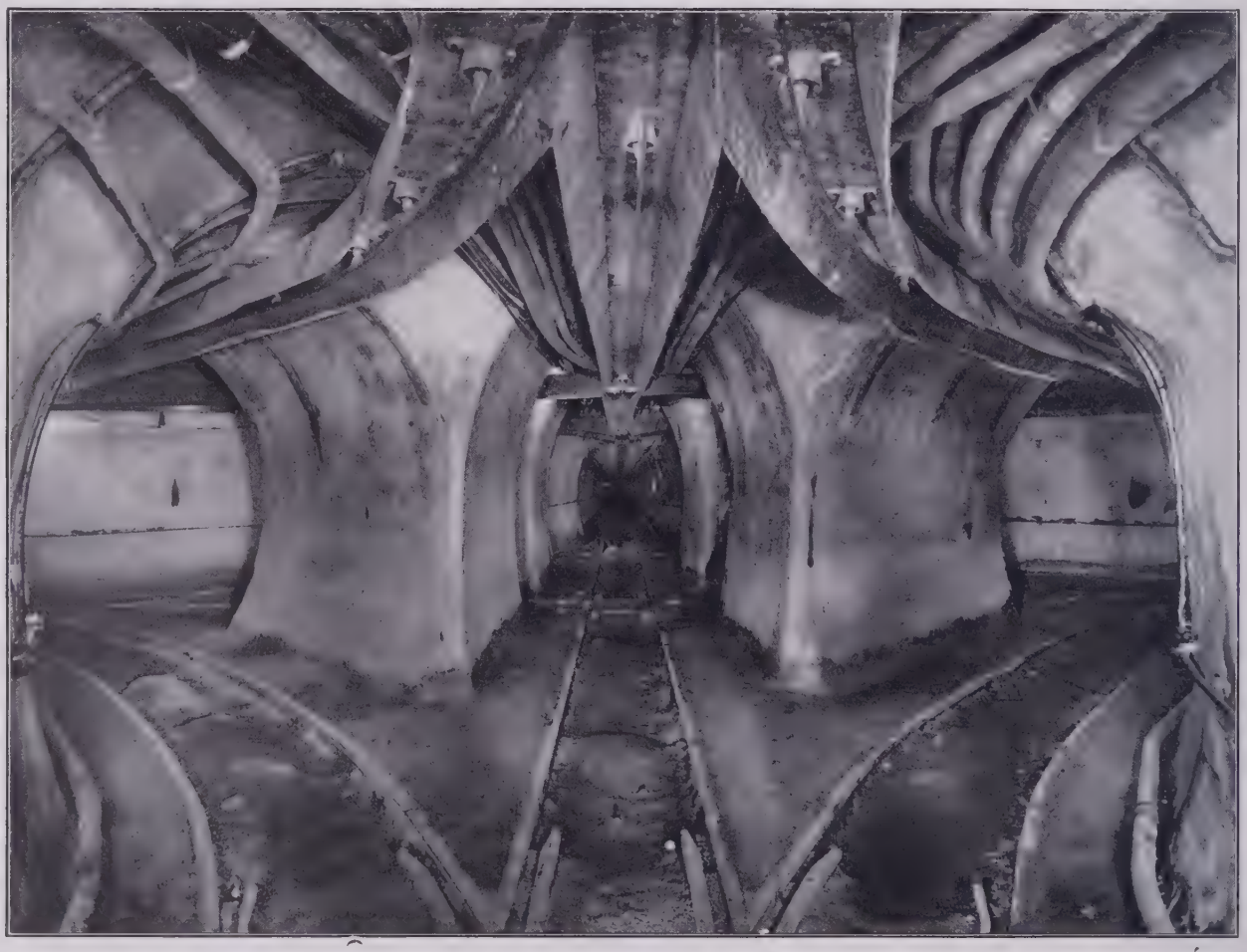
The Illinois Tunnel Company's tunnels are com-

pleted forty feet under the surface of every street in this territory. Every building located on these streets can transfer freight through the tunnels to any part of the United States.

Chicago's business center has been confined to a small area of territory extending 1½ miles north and south and one mile west, with Lake Michigan on the east and the river on the north. The railways have located their freight yards south, north and west so close to this center that the commercial interests have been confined to this territory. The enormous growth not in the tunnels. This not only prevents any congestion in the tunnels, but furnishes a capacity many times the present requirements.

The transfer of coal to the tunnel company's cars is through gravity yards. The coal bins in the yards are between the track level and the roof of the tunnel. When delivered to the buildings it is dumped into a hopper, and by means of coal conveyors is taken up into the basement and dumped into other bins. Ashes are passed down through chutes into the tunnel cars.

Since the completion of the tunnel system all new



SECTIONAL VIEW OF THE ILLINOIS TUNNEL COMPANY'S TUNNELS.

of the city's business has so congested the streets within this area that the cost of cartage of freight to business houses has increased over 100 per cent in the past few years. Five years ago a team could handle five and six loads per day; to-day it is impossible for the same teams to exceed two or three loads per day.

The first necessity in the Illinois Tunnel Company's transportation system was to establish a car which could be elevated into the basement of any building, without cost of alteration to the premises. All cars are loaded and unloaded in the warehouse basements and buildings being constructed in the business section of the city have the excavation and building material transported through the tunnels. The public enjoys the benefit of having this offensive traffic taken from the streets.

The Illinois Tunnel Company is owned by the interests which control the railroads. The tunnels not only benefit the community by removing traffic congestion from the streets, but also they enable all the railroads to receive and deliver freight twenty-four hours each day. By teams they were able to transfer freight only 8 or 10 hours per day even when the weather permitted.

This tunnel system is now only in its infancy; no one can foretell the purposes and uses to which it will be put in the future. It may solve the smoke nuisance. By locating a central steam plant it could supply steam for heating and power to all of the buildings in the business district at less cost than the smoky individual plants now operated by coal can be maintained. Refrigeration can be furnished from the same central power plant, furnishing cold storage to buildings, hotels, restaurants and factories.

Nothing has ever been developed in the history of any city which will prove such beneficial results to the whole community as these tunnels. They will work out the method of better paved and cleaner streets; will prevent loss of that business to the city which increased cost of handling, owing to congestion of its streets, has gradually diverted to other cities, and will permit the use of the streets to every citizen with less risk to life or limb.

The company proposes to extend its system of tunnels to cover the residence district for the delivery of packages, etc. No public improvement of this or any other age ever equaled this undertaking, and Chicago prides itself with being the pioneer city of the world in adopting an improvement which means: The streets for the people—subways for freight.

George W. Jackson, as consulting and contracting engineer, has managed the expenditure of over $25,000,000 for construction work in twenty-five years. He is credited with being the first engineer in this country to complete an all concrete underground construction, and with being the first engineer to design and install a successful pneumatic tube system for the transmission of packages underground, having designed and constructed over fifteen miles of pneumatic tubes for the City and Associated Press Associations of Chicago.

Under Mr. Jackson's management was constructed a fourteen-foot, all concrete, storm-water sewer system for Reading, Pennsylvania. He built the Strickler tunnel, one and a quarter miles in length, through the Pike's Peak Range, at an elevation of 12,700 feet above sea level, and has constructed subways at Indianapolis, Indiana, Columbus, Ohio, and Muscatine, Iowa. He built the bridges at North Halsted, Randolph, Loomis, Eighteenth, Harrison and Twenty-second streets for the city and sanitary district of Chicago; constructed the Wentworth avenue and Belmont avenue drainage systems, the Sixty-seventh street low-level drainage system and miles of other drainage systems for Chicago and St. Paul; laid the entire conduit system in the downtown district for the Chicago Telephone, Western Union and Postal Telegraph and Chicago Underground Sectional Conduit companies, and has done a large part of the construction work for the cable systems of the traction companies, and for the lighting systems of the South and West Park boards.

Mr. Jackson has designed and patented what is known as the first practical steel sheeting, as well as the steel forms and ribs for forming concrete, and what is known as the Jackson column bar for driving rock tunnels. In 1903 he was appointed by Mayor Harrison hydraulic engineer for the High Pressure Water Commission, and designed for it a high-pressure system. He was chosen by the city council's local transportation committee as consulting engineer, to advise it as to the

GEORGE W. JACKSON.

construction of traction subways. He has also devised for the city a new sanitary sewer system.

During the past five years he has been chief engineer and general manager of the Illinois Telephone & Telegraph and the Illinois Tunnel companies, for which he has engineered and managed the construction of thirty-three miles of tunnels, which have been constructed in every street within the district bounded by Fifteenth, Halsted and Illinois streets and Lake Michigan. He has equipped the system with rails, trolleys, drainage facilities and a telephone system.

Mr. Jackson is president of the Jackson & Corbett Bridge & Steel Works; the Jackson & Corbett Company and the Interlocking Steel Sheeting Company, and is advising engineer for the Pike's Peak Hydro-Electric Company.

Mr. Jackson was born in Chicago, July 21, 1861, and is of English-Irish descent. He received his education in the public and technical schools, and in

the school of experience. He graduated from the technical schools in 1878, and entered upon a construction and engineering business in 1880, in which he has been engaged continuously ever since.

His family consists of his wife, Rose Theresa Jackson, his daughter, Rose CaseyJackson, aged eighteen years, and his son, Thomas Casey Jackson, aged twenty years. Mr. Jackson has lived for twenty years in the heart of the business district, his residence being a handsomely appointed flat on the top floor of the building at 177 Monroe street.

W. S. Bogle, president of the Crescent Coal & Mining Company, was born in Dover, New Hampshire, of Scotch parentage. He came to Chicago with his parents in 1861, his father, Daniel Bogle, being one of the noted

W. S. BOGLE.

engraver experts. He was awarded the gold medal for excellence in engraving at the Crystal Palace, New York, the first World's fair held in this country.

Mr. Bogle graduated from the Chicago High School in 1868, and immediately afterwards went into the coal business with his father, and has been in it ever since. He organized the Crescent Coal & Mining Company in 1891, previous to which time he had been western sales agent for the Delaware & Hudson Company for a number of years. From a comparatively small beginning the Crescent Company has grown to be one of the largest firms in point of tonnage in the Chicago market. Mr. Bogle has also owned and developed a great many bituminous coal mines, independent of the Crescent Company, in West Virginia, Ohio and Indiana, his principal operations having been in Indiana. He founded the W. S. Bogle Coal & Mining Company, of which he was president; the Torrey Coal & Mining Company, of which he was also president, and the Indiana Fuel Company in which he held a half interest, and was vice-president of the Baltimore & Ohio Coal Company of Columbus, Ohio. He recently disposed of all his mining interests to the different syndicates which had been absorbing the Indiana mining properties. At the present time, in addition to being president of the Crescent Coal & Mining Company, he is also president of the Consolidated Anthracite Coal Company of Spadra, Arkansas, which controls practically all of the territory in which this coal is found. This coal is equivalent in all respects to the Pennsylvania anthracite, and the demand for it is so great that the company has difficulty in developing fast enough to supply it.

Mr. Bogle is a Democrat, and for many years was active in party management of Cook County. He retired from politics in 1892, after having served as chairman of the Central committee of the party for several years. For a number of years he was vice-president of the Iroquois Club, and served one term as president, refusing on the expiration of his term to accept of the second nomination. He is also a member of the Union League Club, Chicago Yacht Club, Germania Männerchor of Chicago and the Manhattan Club of New York.

In 1872 he was married to Miss Delia Stearns of Chicago. He has three children, two daughters and one son. The son, Walter S. Bogle, Jr., was educated at the Cornell University as mechanical and mining engineer, and is now general manager of the Consolidated Anthracite Coal Company of Spadra, Arkansas, having full charge of the operation of the mines.

Thomas J. O'Gara started in the coal business eight years ago with practically no capital. To-day he controls mining and coal interests worth $6,000,000. Mr. O'Gara started in the business in 1897 as a jobber with little capital and no prospect of ever becoming a mine owner. In 1905, he owned and operated twenty-seven mines, organized a $6,000,000 coal corporation of which he is the president and principal owner, and is now recognized as one of the leading coal men of the country.

Mr. O'Gara was born in Ireland about forty years ago, and came to Chicago in 1886. For several years he worked as a salesman in the coal business, but found time to study law, and after taking a course in the Chicago College of Law, was admitted to the bar in 1893. In 1897 Mr. O'Gara established the copartnership of O'Gara, King & Co., the members of the firm being T. J. O'Gara, John King and William Lorimer. In 1899 Mr. O'Gara bought out his partners and has since been alone in the business. Since that time Mr. O'Gara

has acquired extensive mining properties in West Virginia, Ohio, Illinois and Indiana, and built up a large business.

O'Gara, King & Company, or rather T. J. O'Gara, own and control the following coal mining corporations: Green Ridge Mining Company of Green Ridge, Illinois; Jefferson Mining Company of Springfield, Illinois; Summit Coal & Mining Company of Summit, Indiana; Vivian Coal Mining Company of Jasonville, Indiana; Lincoln Coal Mining Company of Clinton, Indiana; Staunton Mining Company of Staunton, Indiana; O'Gara Coal Mining Company of Wolf Summit, West Virginia; Harrisburg-Big Muddy Mining Company of Harrisburg, Illinois; Chicago-Springfield Coal Company of Springfield, Illinois; Imperial Mining Company of Cambridge, Ohio; United States Coal Company of Chicago, Illinois.

These companies comprise twelve modern mining plants, and produce 3,000,000 tons of coal annually. Mr. O'Gara has, also, obtained control of all the mines in Saline County, Illinois, fifteen in number, and over 75,000 acres of coal lands adjoining, giving him control of the best bituminous coal fie'd west of Pittsburg.

THOMAS J. O'GARA.

Mr. O'Gara's latest and greatest exploit in the coal business is the organization of the O'Gara Coal Company, with a capital stock of $6,000,000. He controls this large corporation and is its president and general manager. The control of the O'Gara Coal Company, with the mines already owned by Mr. O'Gara, gives him twenty-seven mines, all in operation, and having a capacity of 7,000,000 tons a year. His latest enterprise places Mr. O'Gara in the ranks of the leading coal mine owners and operators in the Nation.

James McDonald was born at Lincoln, England, July 21, 1865, the son of John and Elizabeth (Halliday) McDonald. Mr. McDonald was educated at the Lincoln Grammar School, the alma mater of so many famous Englishmen. His scholastic career culminated in 1881 when he won the degree of A. A. (Associate of Arts) from the ancient University of Oxford.

JAMES McDONALD.

In 1882 Mr. McDonald determined to follow Berkeley's famous admonition and "come west." Attracted by the opportunities for young men in Chicago he came in the fall of that year. In 1883 he identified himself with the Chicago, Wilmington & Vermillion Coal Company as general accountant. Later he took charge of the company's jobbing department, and for several years acted as general sales agent. In April, 1903, Mr. McDonald organized the Interstate Coal & Coke Company of Illinois, with large interests in Indiana, Illinois, and Ohio coal fields. Associated with Mr. McDonald is William Job, a large Ohio and Indiana operator. Mr. McDonald is also secretary and general manager of the Mammoth Vein Coal Company in Sullivan County, Indiana, of which company Mr. Job is president. Mr. McDonald is also secretary of Job's Ohio Hocking Coal Company, with large mines in Perry County, Ohio. Mr. McDonald was naturalized in 1886, and has voted the Republican ticket ever since. He takes a great interest in the politics of his

adopted country, but has never seen fit to identify himself with any political organization.

Mr. McDonald was married in 1891 to Miss Florence R. Lemmon and has a son and a daughter, Paul A., and Bessie Mae McDonald. The son Paul is at present attending the Lake Forest Academy and as he has already evinced a decided taste for business is expected to follow in the father's footsteps. Mr. McDonald attributes his success in business to the fact that all through his career he has insisted upon the faithful performance of all contracts. In coal circles Mr. McDonald's word is as good as his bond. Hence his enviable reputation among the representative men of the Middle West.

Robert R. Hammond, president of the Dering Coal Company of Chicago, and formerly second vice-president and general manager of the Chicago & Eastern Illinois Railroad Co., is a native of Iowa. He was born at Ottumwa, February 14, 1857. At nineteen he entered the service of the Burlington Railroad Co. as agent and operator. He left the Burlington in 1881, going to Kansas City for the Kansas City, Fort Scott & Memphis (now a part of the Frisco system). His promotion in the road's service was rapid. In turn he became train dispatcher, chief train dispatcher, division superintendent and general superintendent, holding the latter post after the road had been merged with the Frisco. He was appointed superintendent of the maintenance for the Frisco in August, 1901, and the following year he joined the "Katy" (Missouri, Kansas & Texas) forces, becoming assistant general manager. As general manager of the Chicago & Eastern Illinois he came to Chicago in January, 1903. At this time the road was a part of the Frisco system, and in April, 1904, he was transferred to St. Louis, having been elected second vice-president of the entire system, with 5,000 miles of trackage under his jurisdiction. He returned to Chicago last fall to become second vice-president and general manager of all the Frisco lines east of the Mississippi, which embraced the management of the Chicago & Eastern Illinois, the Evansville & Terre Haute and the Evansville & Indianapolis roads.

ROBERT R. HAMMOND.

His official duties put him in close contact with the coal trade, as the volume of coal shipments over these lines is enormous. Mr. Hammond developed the system to a high degree of efficiency, which proved beneficial both to the Frisco system and the immense coal interests of the West. In March, 1905, he severed all connection with the railway service and became president of the Dering Coal Company, the largest coal concern west of Pittsburg. The Dering Company, which has its offices in the Old Colony building, is a consolidation of six different concerns, of which the Crescent Coal & Mining Company and the Westville Coal Company were the largest. The company operates fifteen properties in Sullivan, Vigo and Vermilion counties, Indiana, and Vermilion and Franklin counties, Illinois. Among these are some of the most valuable coal properties in the West. The company conducts both a wholesale and retail business, the latter having been instituted but recently. J. K. Dering, formerly president of the J. K. Dering Coal Company, now a part of the big concern, is vice-president.

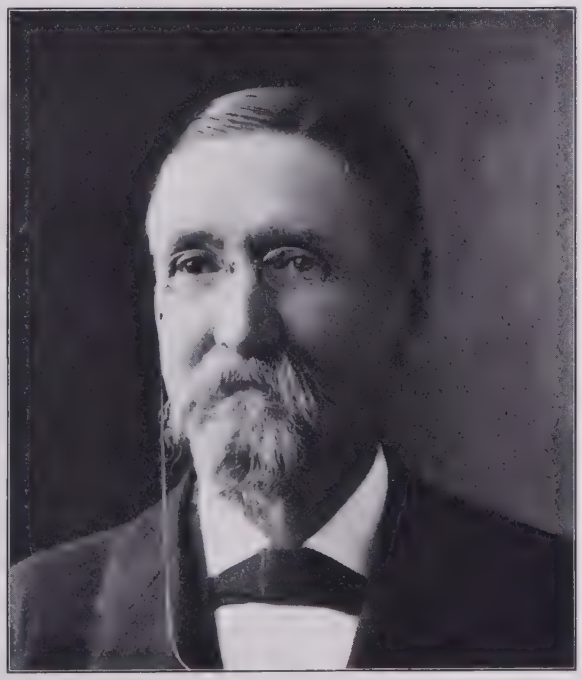
Mr. Hammond, in addition to his affiliation with the principal coal trade organizations, belongs to some of the leading clubs here.

Col. A. L. Sweet is president of the Chicago, Wilmington & Vermillion Coal Company, one of the oldest and largest concerns in the state. Few men have contributed more towards the development of the immense coal interests of the West. Colonel Sweet is a native of Illinois. He was born in Jacksonville, August 21, 1831. His father, the Rev. Joel Sweet, was one of the pioneers of the Baptist clergy in the state. Mr. Sweet's first business experience was in the commission line, in St. Louis, but he shortly afterwards became an agent for the Rock Island Railroad at La Salle, Illinois.

His first association with the coal trade dates from 1865, when he secured a situation with E. D. Taylor & Son of Chicago, in the capacity of general salesman. Three years later he accepted a similar position with the Chicago & Wilmington Company. His promotion in their employ was rapid, and he was made superintendent of the company in 1870. When, in 1872, the Chi-

cago & Wilmington and the Vermillion companies were consolidated, Col. Sweet was elected secretary and general manager of the new company, known to this day as the Chicago, Wilmington & Vermillion Coal Company. In 1890 he was elected president, in which capacity he has served ever since. Maj. T. A. Lemmon is the company's secretary and treasurer.

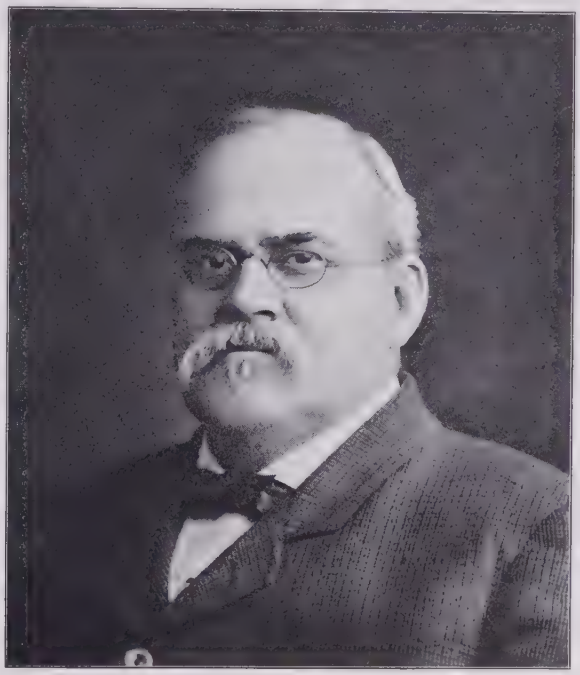
The Chicago, Wilmington & Vermillion Coal Company, whose general offices are in the Old Colony building, ranks as one of the largest coal producers in the state, the output of its properties at Thayer, South Wilmington and Streator for 1904 being 1,250,000 tons. The mine at Thayer, Sangamon County, which yields more than its share of the total output, is a wonder. The development of this property has been remarkably rapid. The first shaft was sunk in June, 1900, and by the following January the mine produced 250 tons a



COL. A. L. SWEET.

day. By December, 1901, the mine's daily capacity was 2,000 tons, which average it has since maintained. The plant is one of the newest and best equipped in the state.

T. A. Lemmon, secretary of the Chicago, Wilmington & Vermillion Coal Company and one of the leading coal men of the West, was born at New Albany, Indiana, April 16, 1841. His parents were Michael and Martha (Griffin) Lemmon, his mother being a grandniece of Thomas Jefferson. Young Lemmon obtained his schooling in his native town. Shortly after graduating, in 1861, he enlisted in the Fifth Ohio Cavalry, fighting at Shiloh and several other large battles. Throughout the war he was attached to the Fifteenth Army Corps of the Army of the Tennessee. After being mustered out, in 1866, he came to Chicago, entering the employ of E. D. Taylor & Son, coal dealers on Market street. Col. A. L. Sweet, president of the Chicago, Wilmington



T. A. LEMMON.

& Vermillion, secured his start in the coal business with the same people. In 1868 Mr. Lemmon established a business of his own, but the fire of 1871 wiped it out. After serving in several capacities he became secretary and treasurer of the Chicago & Wilmington Coal Company, in 1887.

Mr. Lemmon married Miss Sara C. Berry of New Albany, Indiana, in 1865. He has a family of two sons and a daughter, Mrs. James McDonald of this city. Both sons are engaged in the coal business.

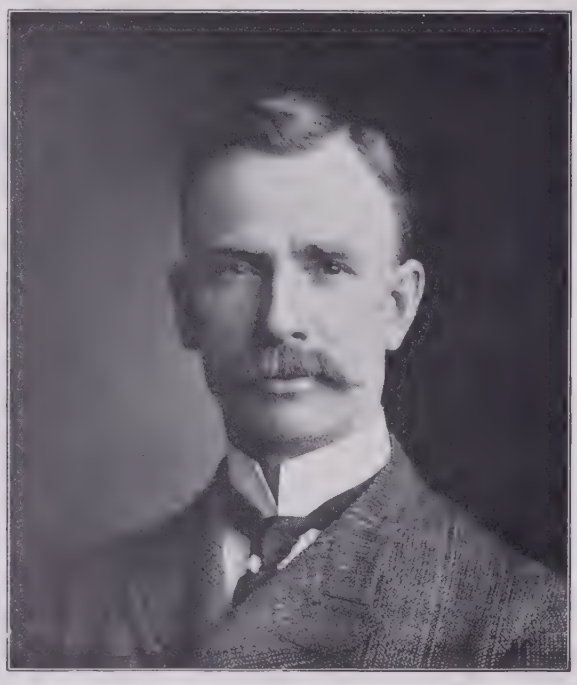
The La Salle County Carbon Coal Company was organized in 1883 and is one of the most prominent operative concerns in the La Salle County field. Its large properties in Illinois produce a high grade of fuel coal, which is shipped to Chicago and other distributing points in immense quantities. The offices of the company are in the Old Colony building.

Franklin O. Wyatt, manager and secretary of the La Salle County Carbon Coal Company, is one of the best known coal operators in the West. He was born at Norwich, Vermont, June 12, 1838, the son of Joseph P. and Abigail Wyatt. He was educated in the public schools and Asbury University, now DePauw University, at Greencastle, Indiana. He began his business life as a civil engineer and was engaged in railway con-

struction and in the operation of railways from 1867 to 1885. Toward the close of this period he became interested in a number of coal properties, and in 1884 became manager of the La Salle company.

He was married at Honesdale, Pennsylvania, in 1872, to Miss Marian L. Purdy. They have three daughters, Edith F., Faith and Phyllis M. The family residence is at 1761 Sheridan road.

The Standard Washed Coal Company, in the short time since it was organized, April 1, 1901, has grown to be one of the largest of the many fuel companies doing business in Chicago. Though the corporation is comparatively new to the Chicago field, its executive



W. T. DELIHANT.

officers have had many years' experience in the local trade.

The concern was organized and incorporated by W. T. Delihant, now its president, and M. C. O'Donnell, its present secretary. Shortly after incorporation the Clear Lake and Spaulding mines in the Springfield district were acquired by the company. Later the Cartersville mine in the district of that name also came under the same control. The entire output of the company now comes from these three properties.

The produet of these mines is such that it is said to improve to a large degree by the process of washing. The popularity of the product is proven by the fact that the company ranks second among Chicago's coal concerns in wagon business, handling about 750,000 tons per year.

The Standard Washed Coal Company specializes in supplying coal in car-load lots, and for steam purposes, such as for office buildings. Its car business is extensive in Dakota, Minnesota, Iowa and Nebraska. In Chicago it has coal yards at the following places: On the Illinois Central railroad at South Water street, Twenty-sixth street, and Fifty-first street; on the Chicago, Burlington & Quincy railroad at Twenty-first and Jefferson streets, and on the Chicago, Milwaukee & St. Paul railroad at Roscoe street and Racine avenue.

The company was incorporated in 1901, with a capital stock of $30,000, and an office consisting of one room in the Fisher building. The following year the stock was increased to $70,000, and the concern moved to the Plymouth building. Last year it took possession of the entire third floor of the Plymouth building, and this spring increased its capital stock to $200,000.

Closely associated with the Standard Washed Coal Company is the Commercial Coal & Coke Company. It was organized in April of 1904, with a capital stock of $30,000. The latter company confines itself exclusively to the retail trade, and does not encroach on the field of the older corporation. The Commercial company secures its coal from the Chicago & Eastern Illinois Railroad, and has its yards at Twenty-second and Jefferson streets.

The officers of the two companies at present are: W. T. Delihant, president; T. J. Hudson, Jr., vice-president; M. C. O'Donnell, secretary, and Albert Tebo, treasurer. E. W. McCullough is mine manager for the Standard Washed Coal Company, and George W. Ford occupies a similar position for the Commercial Coal & Coke Company.

President Delihant started in the coal business in 1881, with W. P. Rend & Company. Later he was with the Peabody Coal Company for ten years, the Edwin F. Daniels Company for five years, the F. G. Hartwell Company, and many other larger coal companies in Chicago. He was born in Missouri, March 1, 1862, and came to Chicago in 1864. He is a member of the Illinois Athletic Club and the Royal Arcanum.

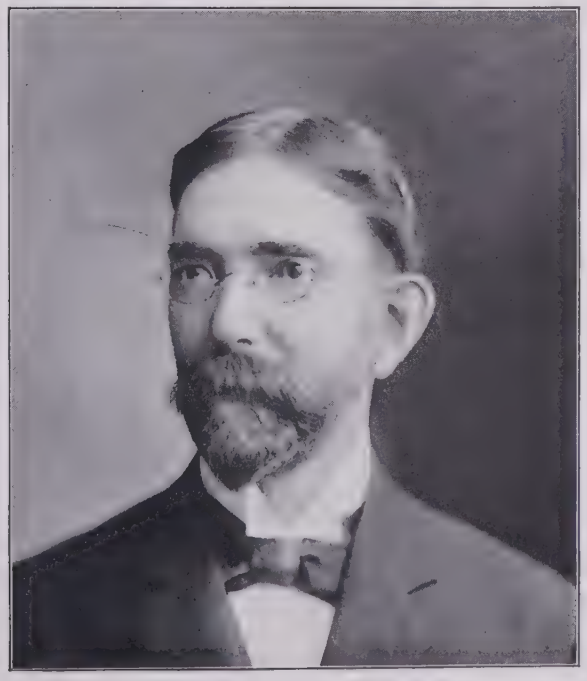
Vice-President Hudson is a son of T. J. Hudson, Sr., the general traffic manager of the Illinois Central Railroad. He entered the coal business in 1894 with the Independent Fuel Company, and in the fall of 1903 came to the Standard Washed Coal Company.

Secretary O'Donnell and Treasurer Tebo have both been in the coal business for the better part of the past twenty years. They have worked with the same firms as Mr. Delihant, and have been with the Standard Washed Coal Company since its organization. Mr. McCullough has spent his life in the Illinois mining fields and is considered one of the best mining managers in the country.

Wells Brothers Company. The building and contracting firm of Wells Brothers Company had its inception, strictly speaking, directly following the Chicago fire in 1871. Warren A. Wells, founder of the business, had come here from St. Paul to engage in some manufacturing enterprise. The fire occurred shortly afterwards and Mr. Wells, seeing his opportunity, established a contracting and mason business with his eldest son, Addison E. From the outset the concern kept abreast of the latest methods in construction, to which fact they attribute their success.

The bi-partnership was retained until 1885, when Fred A. Wells was admitted into the business; the caption of the firm these years was W. A. & A. E. Wells. The elder Mr. Wells died in October, 1900, and two years later the business was incorporated under the style of Wells Brothers Company. The present officers of the corporation are Addison E. Wells, president; Fred A. Wells, vice-president and treasurer; and W. G. Luce, secretary.

Among the buildings erected by Wells Brothers Company and W. A. & A. E. Wells are the Studebaker, Fine Arts, Studebaker Repository, Cable building, McClure building, Republic and Chicago Savings



ADDISON E. WELLS.

Bank buildings, all in Chicago; the Mississippi State Capitol at Jackson, Mississippi; Stock Exchange at Philadelphia, and Belvidere Hotel, Baltimore. One of their earliest jobs was the erection of the old Inter-State and Industrial Exposition building on the Lake Front, in 1872. The company have the following buildings under way: Baltimore & Ohio office building at Baltimore, the $1,000,000 Onondagua court house at Syracuse, New York, the new Mandel building, Chicago, and others.

Addison E. Wells, president, is a native of Janesville, Wisconsin, where he was born February 4, 1856. After completing his high school education he entered business with his father. Fred A. Wells was born

FRED A. WELLS.

July 26, 1859, at Mitchell, Iowa. He went through the public schools and graduated from high school in 1877. He was employed by Fowler Brothers and W. J. Quan & Company, packers at the Union Stock Yards, prior to his association with the contracting business. There is one other son, Judd E. Wells, who is vice-president of Wells Brothers Company of New York, contractors.

MacArthur Bros. Company. The well-known contracting firm of MacArthur Bros. Company was established in New York State in 1860 by Archibald MacArthur, together with his two brothers, James and William, and until 1893 was known under the name of MacArthur Bros. Up to 1884 its specialty was the construction of railroads and canals, but since then the firm has undertaken successfully all kinds of construction work, including that of railroads, canals, streets, sewers and all kinds of other heavy work of this nature, as well as the erection of buildings and bridges and the laying of their foundations. The firm located in Chicago in 1874, and since that time has done a great deal of important work throughout the West and Northwest, although its field of operations is by no means limited to this portion of the

country. In the line of railroad construction, which they have engaged in since their establishment here thirty years ago, may be mentioned the building of the larger portion of the heavy work of the Santa Fe extension from Chicago to Kansas City; the Chicago, Burlington & Quincy extension to St. Paul; many of the smaller extensions of the Manitoba Railroad in Minnesota, and similar work for the Chicago Great Western Railroad. In 1891 and 1892 seventy-five miles of road for the Chicago & Eastern Illinois Railroad were constructed in the central part of the state, and there has also been considerable work of a like nature done for the Illinois Central Railroad. This company have had contracts for construction with nearly all the railroads coming into Chicago. Between 1884 and 1890 the company had an established office in St. Paul, and during that time completed over half of all the street improvements then being made in that city, and between 1886 and 1890 about a million dollars of street work was also done for the city of Duluth. For the World's Columbian Exposition the firm executed contract No. 1, which included a large amount of dredging and the grading of the entire grounds. They also erected the Horticultural building, the Dairy building, the police station, the docking on the lagoons and numerous smaller buildings. They had an important part in digging the Drainage canal, doing all the work on Section 2 and Section 4 and having joint contracts for portions of Sections N and O.

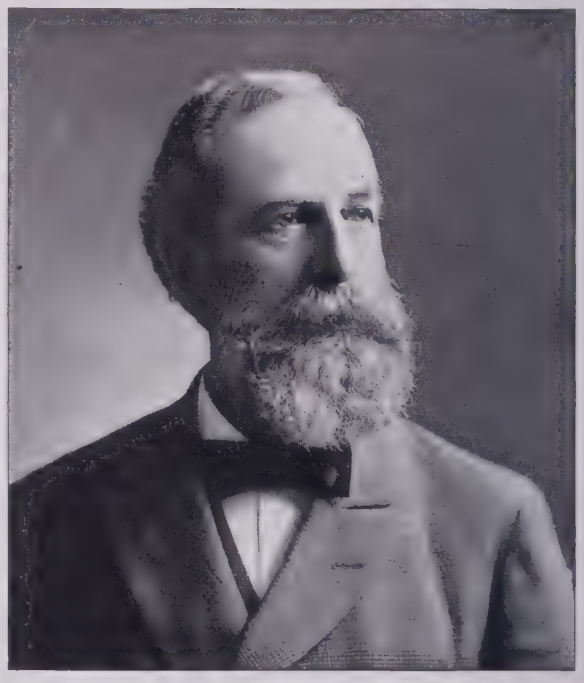
Other contracts completed by the firm include the construction of the foundation for the new Postoffice building of this city and the building of two immense locks for the government on the Cumberland River, near Nashville, Tennessee.

In 1903 they were doing contract work in thirteen states, extending from Massachusetts to Oklahoma, having twenty-eight different contracts under execution at one time. The company have at this time (1905) a large contract with the United States Government for excavating a channel through the rock at the west side of Neebish Island, in St. Mary's River, near Sault Ste. Marie, amounting to nearly $3,000,000; also a contract with the city of New York for the construction of a masonry dam on the Croton water system, amounting to about $1,500,000, also several large railroad contracts under execution at this time. They have just completed the Wachusett dam for impounding water for the city of Boston, which dam contains about 300,000 cubic yards of stone masonry.

In 1893, shortly after the death of James MacArthur, the business was incorporated under the name of MacArthur Bros. Company and in 1903 was incorporated under the laws of New Jersey as MacArthur Bros. Company. The present officers of MacArthur Bros. Company are: Archibald MacArthur, president; Arthur F. MacArthur, vice-president and general manager; John R. MacArthur, secretary and treasurer.

Archibald MacArthur, president of the firm of MacArthur Bros. Company, was born at Mount Morris, N. Y., in 1834. His father was a prominent contractor in New York State at that time, and from him his son gained his first knowledge of the contracting business; his education was academic, in which he pursued a course of civil engineering, but never followed civil engineering as a profession.

At that time the contracting business was far different from what it is now; without definite headquarters, contractors traveled from place to place, wherever a



ARCHIBALD MacARTHUR.

piece of work could be secured; these temporary locations were generally retained only so long as was necessary to complete the contract. In this rather itinerant mode of life, contractors saw a considerable portion of the world. Mr. MacArthur traveled through all of the United States and Canada, Mexico, Central America, South America, West Indies and the principal countries of Europe.

At the age of twenty-one, together with his brothers, James and William, he became one of the firm of MacArthur Bros., which, for nearly a quarter of a century, engaged successfully in business, with its headquarters in New York State; its location being removed to Chicago in 1873.

Arthur F. MacArthur, vice-president and general manager of MacArthur Bros. Company, was born at

Oramel, New York, October 24, 1860. His parents are Archibald and Keturah (Pratt) MacArthur.

He came to Chicago in 1874 and prepared for a collegiate course at the Chicago Academy, entering Harvard in the fall of 1878, from which institution he was graduated with the class of '82, receiving the degree of A. B. He then returned to Chicago and for the following two years was connected with the Chicago yard of The W. & A. MacArthur Lumber Company of Cheboygan, Michigan. In 1884 he moved to St. Paul, Minnesota, to take charge of the large street contracts under execution for the city of St. Paul by the MacArthur Bros. Company, contractors, but returned to Chicago in 1890 in order to take charge of the work being done by them in preparing the grounds of Jackson Park for the World's Fair. He was admitted to the firm in 1887, and in 1893 became its treasurer.

ARTHUR F. MacARTHUR.

Mr. MacArthur has traveled quite extensively. In 1888 he made a trip through Egypt, the Holy Land and continental Europe, and in the winter of 1889 he spent some months in visiting the countries of South America. He was married in 1889 to Miss Mary S. Barnum, daughter of Mr. David Barnum of New York City.

John Meiggs Ewen, engineer and builder, vice-president of the Thompson-Starrett Company, was born at Newtown, New York, September 3, 1859. His father, Warren Ewen, was for many years chief engineer of construction for the railroads in Chili and Peru, South America, among them the famous railroad in the clouds to Oroya. Young Ewen spent his boyhood days in South America with his father, but at the age of twelve was sent to the Russell Military Academy at New Haven, Connecticut, and then to the Stevens Institute of Technology, from which he was graduated in 1880.

Shortly afterward he was engaged as engineer in charge of construction for the J. B. & J. M. Cornell Iron Works at New York, where he had charge of the erection of many buildings and also of the elevated roads to Brooklyn. He next joined the forces of W. L. B. Jenney, the Chicago architect, going from there to Burnham & Root, where he became general manager. He left them in 1889 to organize the original Fuller Company with George A. Fuller. He was vice-president and general manager for years. He went to London for the purpose of introducing American construction methods, but abandoned the idea and returned to this country. After acting as consulting engineer for the George A. Fuller Company until 1903, he became vice-president and western representative of the Thompson-Starrett Company, the largest builders in the country, which position he now holds.

Mr. Ewen is a member of the American Society of Civil Engineers, the American Society of Mechanical Engineers and the Western Society of Engineers. During the career of twenty-four years he has figured in the construction of some of the largest office buildings in the country, many of them in Chicago. He has recently been appointed to serve on the county commissioners' committee to select plans for the new Cook County court house. He is also one of the committee of engineers appointed by the commissioner of Public Works to

JOHN MEIGGS EWEN.

to report upon the construction of the Illinois Telephone Company's subway of this city. The Thompson-Starrett Company is now erecting the new Wanamaker store in Philadelphia, the Union Station at Washington, the Rockefeller building in Cleveland, the new Northern Trust Bank building of this city, and the great plant for Sears, Roebuck & Company. They recently completed the Heyworth building and the Thomas Orchestra building, both in Chicago, the Kuhn-Loeb, Empire-Realty, Aeolin, Navarre Hotel, Marie Antoinette and St. Regis hotel buildings in New York, the Touraine and Title Guarantee and Trust buildings in Brooklyn, the Penn building at Philadelphia, the Keystone Bank at Pittsburg, the Union Bank in Winnipeg, Canada, and others, ranging from twelve to twenty stories in height. The Thompson-Starrett Company have offices in New York, Chicago (Railway Exchange building), Boston, Philadelphia, Baltimore, Washington, St. Louis, Cleveland, Pittsburg, Toronto and Winnipeg.

Henry W. Schlueter, well known as a contractor and builder, was born at Unterluebbe, Westphalia, Germany, on February 22, 1861. He spent his boyhood days on his father's farm. After receiving an elementary education at the village school he entered the gymnasium at the age of fourteen, studying architectural drawing, engineering and kindred technical branches. He graduated in 1880 and came to America in October of the same year.

Finding his way to Wisconsin, he obtained employment in a lumber camp and sawmill in the northern part of the state, and subsequently secured a position as estimator and draughtsman for a large sash and door factory. After learning the business he established a factory of his own at Topeka, Kansas. The following year the mill burned to the ground and the business was abandoned. In June, 1891, he came to Chicago, attracted by the World's Fair, and organized the Congress Construction Company, of which he was the vice-president and secretary and Gustav Ehrhardt the president.

Mr. Schlueter established in 1898 an independent contracting and building business, the offices of which have been in the Marquette building for a number of years.

At the St. Louis Exposition he erected the Transportation building, the Fraternal Temple, the California, Massachusetts and Wisconsin State buildings, the Government Indian school, the foundation for the Ferris Wheel, and the foundations for the installation and testing plants for the Pennsylvania Railroad in the Transportation building, for testing the speed and power of locomotives. In addition to these, Mr. Schlueter has erected numerous other large structures, among them the Bartlett Gymnasium at the University of Chicago, the Sears, Roebuck & Co. building, the court house at Des Moines, Iowa, where he had his own sawmill and stone yards on the ground, and many others. He is now engaged on several important jobs in Iowa, the Deaf and Dumb school at Council Bluffs, the Hall of History at Des Moines, and three buildings

HENRY W. SCHLUETER.

at the Iowa State College at Ames, all of the above being state institutions.

Mr. Schlueter was married to Miss Minnie Meyers of Green Bay, Wisconsin, and his two sons, Walter M. and Christian H., and one daughter, Lillian. His eldest son, Walter M., is now superintending the work at Council Bluffs. Mr. Schlueter is a member of the Automobile Club and the New Illinois Athletic Club, besides being affiliated with a number of trade organizations.

Robert W. Hunt & Co. The engineering and inspecting firm of Robert W. Hunt & Co., with their general offices in The Rookery, Chicago, and branch offices in New York, Pittsburg and London, England, was established in April, 1888. The firm is composed of the following gentlemen: Robert W. Hunt, John J. Cone, A. W. Fiero, James C. Hallsted and D. W. McNaugher.

The principal business of the firm is the inspection of railway materials, such as rails, splice bars, bolts, nuts, spikes and cars, also structural material for bridges and buildings. They also have a special department for the testing of the efficiency of engines and boilers, notably city waterworks engines. In this connection they have been employed by the city of Chicago

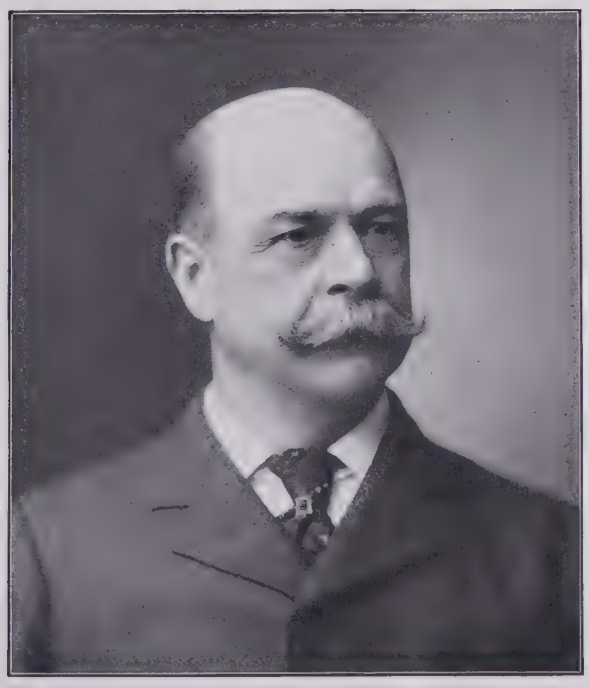
to supervise the construction and erection of the engines purchased by it during the last few years, and in addition have represented the city in the final duty tests on which the engines were accepted. They also represented the city of St. Paul in the same capacity, and later the city of Buffalo.

They have designed several electric power stations and cement factories.

The investigation and reporting upon manufacturing establishments has become a very important branch of their business. Some of the largest industrial concerns in the United States have been reported upon by them, and on such reports the reorganization and the placement of bonds have been based.

In connection with the growing export trade of the United States in both metals and machinery, the firm has been employed by foreign purchasers to supervise the execution of their contracts. This covers not only railway materials, but pumping engines, cars and bridges.

The senior member of the firm, Robert W. Hunt, was identified with the manufacture of Bessemer steel in America from its earliest introduction, and had



ROBERT W. HUNT.

charge of the first Bessemer steel plant operated in America, located at Wyandotte, Michigan, and afterward the steel works of the Cambria Iron Company, Johnstown, Pennsylvania, and the Troy Steel & Iron Company, Troy, New York. In fact, the earliest steel rails manufactured in this country on a commercial basis were under his direction, and it was based upon his long experience as a manufacturer that the firm of Robert W. Hunt & Co. was established, and the business developed. The other members of the firm are all educated engineers and men who have had long practical experience in manufacturing and inspection, as well as other engineering work.

Mr. Hunt is a past president of the American Institute of Mining Engineers, the American Society of Mechanical Engineers and the Western Society of Engineers, and is also a member of the American Society of Civil Engineers, and acted as secretary of the committee of that society which designed and recommended the rail sections, which are now recognized as the standard ones by the majority of the railroads of the United States. He is also a member of the Institute of Civil Engineers and the Institute of Mechanical Engineers and the Iron and Steel Institute. Mr. Hunt's specifications for the manufacture of steel rails are recognized as standard ones, and his papers, contributed to the several scientific societies to which he belongs, have had a very large influence upon the development of the steel industry of America. In fact, he is recognized as an authority on that subject, both in this country and in Europe.

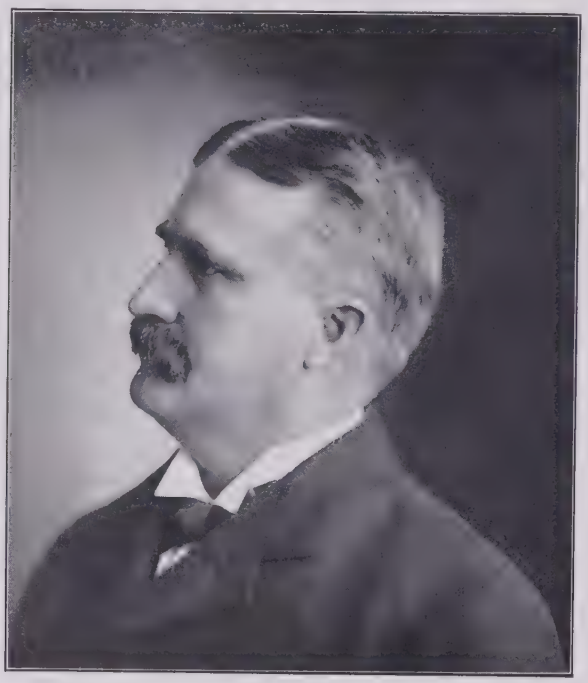
As necessary to their business, the firm have thoroughly equipped chemical and physical laboratories, in which the assaying of ores and the analyses of metals, oils, paints, etc., as well as the physical testing of materials, are conducted. So well is the firm's reputation established, that they have for their patrons nearly all the most prominent railway systems of the country, fully 75 per cent of the rails manufactured in America being subject to their inspection.

Albert W. Fiero, civil engineer and member of the firm of R. W. Hunt & Co., was born in Calhoun County, Michigan, in June 1849. His parents, P. V. and Jane (Halliday) Fiero, were early settlers in that county, coming from New York State in 1836. After graduating from high school in 1871, he obtained employment with the Grand Trunk Railroad, and the following year he was made assistant engineer and put in charge of the road's construction work between Cassopolis, Michigan and Valparaiso, Indiana.

He resigned in 1873 to accept a more responsible position with the Chicago & Illinois Railway, as engineer of construction, with headquarters at Joliet, Illinois. Two years later he became inspector of rails for the Iron and Steel Works of Joliet, whence he removed to St. Louis, in 1876, to become foreman of the finishing department of the Vulcan Iron and Steel Works of that city. He returned to railroad work in 1878, assuming charge of the construction of the line from Mexico, Missouri, to Kansas City, but he was subsequently transferred to Joliet. He became identified with the R. W.

Hunt Company in 1888, of which firm he has since become a member.

Mr. Fiero is a member of the Western Society of Engineers and the Engineers' Club of New York City, the American Railway Engineering and Maintenance of Way Association, the American Institute of Mining Engineers, and the Union League Club of Chicago, and is politically a Republican. He was married in 1881 to Miss Florence Carpenter of Joliet, Illinois, and has two children, Emilie Louise and Conro. The latter, who was graduated from Yale University in June, 1904, is



ALBERT W. FIERO.

assistant engineer for the San Pedro, Los Angeles & Salt Lake Railroad and also assistant engineer of the Indiana Harbor Railroad.

John C. McMynn, mechanical engineer for Robert W. Hunt & Company, was born January 16, 1869, at Racine, Wisconsin, the son of Colonel John G. McMynn and Marion (Clark) McMynn. Mr. McMynn was educated at his father's academy and at the University of Wisconsin (1887-88-89). In 1890 he was given the degree of B. A. at Williams College, Massachusetts. He got his M. E. and M. M. E. from Cornell in 1891 and 1892 respectively.

In 1892 Mr. McMynn accepted an offer to come to Chicago and associate himself with Robert W. Hunt & Company.

Mr. McMynn is a prominent clubman. He holds membership in the C. A. A., the Marquette, the Chicago Yacht and the Columbia Yacht clubs. Politically he is a dyed-in-the-wool Republican. Although an exceptionally busy man, Mr. McMynn never forgets the cardinal duty of a good citizen. National and local elections always find him ready to "do his duty as God gives him to see his duty."

JOHN C. McMYNN.

Mr. McMynn was married on January 15, 1904, to Miss Elsie Voche of Chicago. Chicago has many brainy young men, but few of them who have been the architects of their own fortune have such great gifts as has young Mr. McMynn.

Bion J. Arnold was fourteen years old, when, using a magazine picture for a model, he constructed the first bicycle ever seen in Nebraska. Succeeding years have trained and developed the mechanical genius of the one-time precocious country boy, until to-day he is considered one of the leading electrical engineers of the world. His father was a western pioneer and a member of the first territorial legislature of Nebraska. Other ancestors were leaders in the colonial and revolutionary days of this country. Joseph Arnold wanted his son to follow in his footsteps and read law, but the successful completion of the bicycle convinced the father that his son's talents were not those of a barrister. A locomotive that would run was young Arnold's triumph in his eighteenth year. The next year he left home to come east, where he could meet older engineers and attend school.

At the present time, Mr. Arnold divides the week between his Chicago and New York offices. In Chicago he is the consulting engineer for the city and upon him devolves the burden of planning a satisfactory municipal transportation system and reorganizing the $100,000,000 worth of traction properties. In New

York he is acting as consulting engineer for the New York Central and the Grand Trunk Railway companies and is a member of the commission that is designing and installing the $30,000,000 system by which the New York Central Railroad will propel all trains within thirty miles of the Grand Central station by electricity.

Mr. Arnold was born at Casenovia, near Grand Rapids, Michigan, August 14, 1861. The family moved to Nebraska where he attended school until entering Hillsdale (Michigan) College, which gave him the degree of B. S. in 1884, and the honorary degree of M. Ph. in 1889. In 1903 his alma mater conferred on him a testimonial diploma in recognition of his "distinguished learning and achievement in invention and mechanical and electrical engineering." Mr. Arnold also attended Cornell University and holds an honorary degree from the University of Nebraska. He was only 27 years old and mechanical engineer of the Great Western Road when he resigned the position to enter a post-graduate course at Cornell. Not satisfied with a position in which many an older engineer would have been contented, he was willing to start anew in order to equip himself for further advance in his profession.

After leaving Hillsdale College, Mr. Arnold's first position was with the Upton Manufacturing Company of Port Huron. From there he went to the Edward P. Allis Company of Milwaukee. In 1887-1888 he was mechanical engineer of the Chicago & Great Western Railroad; from 1888 to 1889, general agent of the Thomson-Houston Electric Company of St. Louis, and from 1890 to 1893, consulting engineer for the General Electric Company.

Since that time he has been in business for himself. He designed the Intramural Railway at the World's Columbian Exposition and its equipment was an innovation in electrical engineering. The electrical plant of the Chicago Board of Trade which is copied by many office buildings where economy of space is desired, was planned and installed by him.

The Chicago & Milwaukee Electric Railway, equipped by him, demonstrated to the world the practicability of his theory of long-distance electrical railroading. One of the mountain lines of the Burlington system was also equipped by him. Mr. Arnold holds patents covering his inventions and has written various technical articles of value to his profession.

He has always been a pronounced advocate of the merits of the storage battery and has probably done more than any other man to demonstrate and prove its efficiency and economy of operation. So positive were his opinions when he installed the sub-station rotary converter storage-battery system for the Chicago & Milwaukee Electric Railway, that he financially guaranteed the efficiency and operation of the entire line. So great was the saving over previous methods of operation that now electric roads are generally equipped with the same system. His pioneer work in single-phase traction has recently caused another advance in the art of electric railroading and makes practicable the electrification of many steam roads. The problem of operating the trains of the New York Central with electricity is one of great difficulty. Upon its successful solution will depend whether electricity is to be installed as a motive power for railroads.

Numerous reports on Chicago's traction problem have been presented by Mr. Arnold since he first took up the work. The first comprehensive plan for routing, equipping and operating all lines—elevated, surface or subway—was presented November 1, 1902, after four

BION J. ARNOLD.

months' investigation. Supplementary reports have since followed. Traction negotiations even in other cities are based on these reports of the Chicago situation.

Mr. Arnold is president of the Arnold Company, an electrical engineering corporation, operating for many of the principal steam railway companies of the country. He also is president of the Kenosha (Wisconsin) Electric Railway Company. He is a member and a former president of the American Institute of Electrical Engineers, and was one of its five representatives at the International Electrical Congress at Paris in 1900. He is a trustee of Hillsdale College and has served as a trustee of the Western Society of Engineers. He was first vice-president and chairman of the executive committee of the International Electrical Congress at St. Louis in 1904. He is vice-president of the

United Engineering Society of New York, an organization having charge of the $1,500,000 donation of Andrew Carnegie for the construction of a joint engineering building for the American Institute of Electrical Engineers, the American Society of Mechanical Engineers and the American Institute of Mining Engineers.

Mr. Arnold is also a member of the Union League Club of Chicago, the Transportation and Engineering clubs of New York, the American Association for the Advancement of Science, the American Society for the Promotion of Engineering Education and the American Society of Civil Engineers.

Lyman Edgar Cooley, civil engineer, was born at Canandaigua, Ontario County, New York, December 5, 1850, the son of Albert B. and Aksah (Griswold) Cooley. He is a great-grandson of John Cooley, who removed to western New York from Connecticut early in the nineteenth century, making his home on a farm a few miles west of Canandaigua.

The family is traced to Sir William Cooley in England, before whose time the name is found written Cowley and Colley. A collateral branch was the Wellesley or Wesley family, and from one Richard Colley, who assumed this name to inherit estates, Arthur Wellesley, the first Duke of Wellington, was descended. The original Cooley in this country came to New England prior to 1636, and from this stock has sprung many able men, among whom is the late Judge Thomas M. Cooley of Michigan.

After a course of study at the Canandaigua Academy, Lyman E. Cooley taught in that institution in 1870-1872, and then attended the Rensselaer Polytechnic Institute at Troy, where he was graduated in 1874, having covered the course in two years. In 1874-1877 he became the professor of engineering at Northwestern University, and in 1876-1878 was associate editor of the Engineering News. In 1878 he aided William Sooy Smith in the construction of the railroad bridge over the Missouri, at Glasco, Missouri. Later in the year he was engaged under Major (now Colonel) Suter, on the improvement of the Missouri and Mississippi rivers, with headquarters at St. Louis. For four years following he had charge of local improvements and surveys in Nebraska, Iowa, Missouri, Arkansas and Tennessee. For two years more he was chief assistant, in general charge of all local work on the Missouri River below Yankton. Returning to Chicago toward the end of 1884, Mr. Cooley became editor of the American Engineer, but in 1885 severed his connection with that journal. Later he became interested in sanitary agitation. As a member of a sub-committee of the Citizens' association, he drew the report, in September, 1885, which began the public agitation in favor of a sanitary canal, and aided in securing the organization of a drainage and water supply commission, of which he was chief assistant in 1886-1887. In 1888, he was consulting engineer to the city, and to the commission that framed the sanitary district act, and represented the city and its seven civic organizations in promoting the bill to a passage by the State Legislative in 1889. He acted as engineer to the commission that determined the boundaries of the Sanitary District in 1889, and was the first chief engineer during 1890. He became a member of the board of trustees in 1891, serving until the expiration of his term in December, 1895, and during the entire time was chairman of the Engineering Committee. He also acted as consulting engineer of the Sanitary District in 1897. Since 1889 he has taken an active interest in the extension of the taxing power in the district; in fact, has stood sponsor for all legislation thus far had in relation to this question. In 1895 he was appointed by President Cleveland a member of the international deep-waterways commission (a joint commission with Canada), together with Dr. James B. Angell, of Michigan, and John E. Russell, of Massachusetts, and had charge of the investigation. Surveys have since been made for ocean navigation from the Atlantic seaboard to Chicago and Duluth via the Great Lakes. Of the international association to promote this project, he is the American vice-president. In the fall of 1897, Mr. Cooley, with a number of contractors and engineers selected by him, went to Nicaragua, incidently visiting Panama, for the purpose of advancing the

LYMAN EDGAR COOLEY.

Nicaragua Canal. The events of the Spanish war interrupted their plans, and the project has since been a matter of government concern.

In the summer of 1898 he acted as advisory engineer to the committee appointed by Governor Black to investigate the expenditures for the improvements of the canals of the state of New York under what is known as the "Nine Million Act." In 1896-1897 he served as a member of the expert committee appointed by Mayor Swift of Chicago to devise a remedy for the pollution of Lake Michigan by means of intercepting sewers, etc. He has been a member of the Western Society of Civil Engineers since 1875, and in 1888 was its secretary, and was its president two terms, 1890-1891. In 1901 he was a member of the Expert Commission on a comprehensive plan for the completion of the works of the Sanitary District of Chicago. He has been the consulting engineer for the Union Water Company, Denver, Colorado, during the construction of the Cheesman dam, which controls the flow of the South Platte near the outlet of South Park. This dam is the highest in the world, requiring four years for its construction. It is 225 feet high and forms a reservoir with a depth of 210 feet, and is designed to control a reserve supply of water for the City of Denver, and is sufficient for three years. Mr. Cooley is engineer for the Keokuk & Hamilton Water Power Company, which recently secured the consent of congress to the construction of a dam across the Mississippi River at the foot of the Des Moines rapids. This dam will be over a mile long, and 30 to 35 feet high, and will produce a minimum of over 60,000 horse power. Mr. Cooley has continued to promote the deep waterway between Chicago and St. Louis, which formed part of his original conception of the sanitary solution in 1885.

Mr. Cooley is a member of the American Society of Civil Engineers, the Western Society of Engineers, the Chicago Academy of Sciences, the National Geographic Society, and the Chicago Press Club.

He has lectured at the State Universities of Wisconsin, Illinois and Michigan. His most important publications on his special subject are: "Lakes and Gulf Waterways" (1888-1889), and a more elaborate work with the same title in 1891.

He was married at Canandaigua, New York, December 31, 1874, to Lucena, daughter of Peter and Lucena McMillan. They have two sons and a daughter.

Henry M. Byllesby, president of H. M. Byllesby & Company, incorporated, is one of the well-known mechanical engineers of the city, whose name connected with a big commercial enterprise is looked upon as a guarantee of its success. He was born in New Jersey, the son of the Rev. DeWitt C. and Sarah Mathews Byllesby, and was educated in Lehigh University as a mechanical engineer. He afterward served in the shops and drafting office of Robert Wetherill & Co., Chester, Pennsylvania, and was subsequently in the engineering department of the Edison Electric Light Company, New York. Mr. Byllesby then became first vice-president and general manager of the Westinghouse Electric Company, managing director of the Westinghouse Electric Company, Limited, of London, England, and afterward president of the Northwestern General Electric Company.

Mr. Byllesby's rapid advance in the world of electric development soon gave him a foremost position among the electrical experts of the country. During the first few years after his leaving college he was constantly

HENRY M. BYLLESBY.

identified with the development of electric light, street railways, power transmission and gas plants. He launched into a business career for himself when H. M. Byllesby & Company was incorporated and he became president of the corporation. The company is engaged in the business of consulting, designing and constructing engineers for all classes of railway, light, gas, hydraulic and power transmission plants.

The company is largely interested as managers and engineers and also as part owners in utility properties at San Diego, California, Oklahoma City, Oklahoma Territory, Fort Smith, Arkansas, Zanesville, Ohio, Mansfield, Ohio, as well as a large number of properties distributed generally throughout the country.

Although his business interests have been vast, Mr. Byllesby has found time to indulge in the social amenities of life and is a member of the Union League Club,

Chicago, the Midlothian Country Club, Chicago, the Lawyers' Club, New York City and the Queen City Club, Cincinnati, Ohio.

He married Margaret Stearns, daughter of the late H. P. Baldwin of the New Jersey Central Railroad Company. His residence is at 4642 Lake avenue, Chicago.

James Ormerod Heyworth, one of the most successful of western civil engineers and contractors, was born at Chicago, June 12, 1866. His elementary education was secured in the grammar and high schools of this city. After graduating from high school with honors, Mr. Heyworth entered Yale University and completed his college education at that institution.

Even as a boy, Mr. Heyworth's tastes inclined to engineering and scientific work. His studies and

JAMES ORMEROD HEYWORTH.

collegiate training were directed along the lines he preferred and he started active engineering work immediately after leaving college. As a general contractor he has supervised and completed important engineering undertakings in many parts of the United States. The immense jetties at Port Arthur, Texas, were constructed by him. Those at Fernandino, Florida, also, are the result of his planning and work. The locks and dams of the Warrior river in Alabama are others of his accomplishments. Various sections of Chicago's superb track elevation system now are being built by Mr. Heyworth. A number of other large engineering tasks are under his charge and nearing completion.

Mr. Heyworth's parents were James O. and Julia F. (Dimon) Heyworth. He was married to Miss Martica G. Waterman of Southport, Connecticut, and has his home at Lake Forest, Illinois. Mr. Heyworth is a member of numerous social and professional clubs. Among the number are: The University Club, the Calumet Club, the Engineers Club, the Onwentsia Club, the Washington Park Club, the Chicago Yacht Club and the Tolleston Club. His business office is in the Railway Exchange building.

Kohler Brothers, contracting engineers, specialize in the complete installation of lighting and power plants, the building of electric railways and various phases of newspaper and printing press engineering. The reputation of the firm in the latter line is world-wide, and it owns many valuable patents which increase the production of press rooms, save time and paper, and govern and control presses and other machinery by means of electric push buttons.

The firm was organized in 1891 by G. A. Edward Kohler and Franklin W. Kohler. Its main offices are in Chicago, occupying suites 1804 to 1812 Fisher building. The factory is located at 54-56 Custom House court. The New York office is in the Metropolitan Life building and the European office is in London at 56 Ludgate Hill.

Among the electrical contracts that the company has completed in and near Chicago are the following: Chicago & Alton railroad shops, Chicago, Burlington & Quincy railroad shops, the Illinois Central terminal and suburban stations, the Oregon Short Line shops, South Side Elevated Railroad entire installation, the Union Pacific Railroad shops, the lighting and heating plants of the Illinois Eastern Hospital for the Insane and the Illinois Northern Hospital for the Insane, the lighting plant of the St. Charles Home for Boys, and numerous other public and private institutions.

The devices of Kohler Brothers are used in printing establishments in all parts of the world. Collectively these inventions are known as The Kohler System, and are adopted in their entirety by most of the best equipped newspaper offices. The Kohler System includes patents covering Stone magazine reels, for continuously feeding paper without stopping the press, pneumatic lifts, paper carriers, trucks and lifts, plate trucks, auto-plate controllers, flat-bed press controllers and all devices entering into the operation of newspaper and printing plants. Their electric push-button method of control is the most distinctive feature of the system.

After the great Baltimore fire, every new press-room in the city, except one, was designed, reconstructed and equipped with The Kohler System.

Notable printing establishments which use this system for the electrical operation and speed control of their presses and other machinery are: The United

States Government Printing Office, the Chicago Daily News, the Chicago Tribune, the Brooklyn Eagle, the Baltimore American, the St. Louis Post-Dispatch, Frank A. Munsey, R. R. Donnelley & Sons Company, the Metropolitan Life Insurance Company, Sears, Roebuck & Company, Arbuckle Brothers, the Morning Post of London, Le Matin of Paris, El Mercurio of Santiago, Chili, and hundreds of others.

The Roebling Construction Company, after a long series of practical experiments, has perfected one of the most effective and economical systems of fireproof construction for modern buildings, and its systems of floors and partitions is rapidly becoming one of the best known and most favored throughout the country.

Fireproof construction as an economic feature of modern buildings has in recent years attained a position of great importance and has been the subject of exhaustive investigation by engineers and architects, and claims an important place in all engineering and architectural journals. Numerous methods are now on the market, only a few of which satisfactorily fulfill the requirements, and some of these are so expensive as to preclude their extensive use.

The main offices of The Roebling Construction Company are located in New York City, where it employs a very large force of engineers. Its factories are at Trenton, New Jersey. Branch offices are located in the principal cities of the country, and the company is prepared to make estimates promptly and execute contracts in all parts of the United States, Canada and Mexico.

The Chicago office is in charge of Mr. Andrew W. Woodman, who is not only the Western but also the New England agent of the corporation, having another office at Boston, where he spends part of his time. He is a graduate of the Massachusetts Institute of Technology and has been associated with The Roebling Construction Company since its incorporation. His early experience in structural work was obtained in the East, where he served for a number of years with one of the leading bridge companies, after being graduated from college.

Among the fireproof buildings in Chicago in which the company has erected its system of floor construction may be mentioned: Orchestra Hall, the addition to the Rialto building, the addition to the Union League Club, The Inter Ocean's new building, Brooke's Casino, McVicker's and other theaters and numerous high-class apartment buildings and hotels.

Some of the largest works of the company have been carried on in New York city, as that city has the reputation of erecting more new buildings than any other city in the country. It has built its floors in some of the finest hotels and private residences in the country, notably: the Astoria, the St. Regis, the Astor and the Belmont hotels, the Andrew Carnegie, P. A. B. Widener and Edwin J. Berwind residences. At present the company is engaged upon the largest fireproof building in the world, the store of John Wanamaker at Philadelphia, a building which will contain about forty acres of floor space.

The system of floors as developed by the company is capable of economic use in any and all kinds of buildings, and in each case the type of floor used is scientifically designed so as to properly meet the existing conditions. By its method the company can with ease build floors capable of sustaining the heaviest loads, as proof of which may be cited the fact that its construction has in several instances been used for the floors of heavy bridges. Experiments made of a section of flooring previously subjected to a five-hour fire test, in which the temperature reached a height of 2,350 degrees, proved that it could sustain a load of 4,100 pounds per square foot.

The Roebling system is impregnable to fire, can be quickly installed and assures immunity from those unsightly stains which so generally appear on ceilings where other forms of floors are used. It is the cheapest and most successful of all the fireproofing systems, and buildings where it is used are assured of the lowest rates of insurance.

E. C. & R. M. Shankland, of the Rookery building, is one of the leading engineering firms in the West. The firm was organized in 1898, both brothers at that time being connected with D. H. Burnham & Company, the architects. Edward Clapp Shankland came into international prominence in 1892, when he acted as engineer of construction of the World's Columbian Exposition and later as chief engineer of the fair. He was born in Pittsburg, Pennsylvania, August 2, 1854. At an early age he went with his parents to Dubuque, Iowa, where he was educated in the public schools. In 1878 he was graduated from the Rensselaer Polytechnic Institute in Troy, New York, as a civil engineer. Immediately after his graduation he was employed by the national government on the improvement of the Mississippi and Missouri rivers, being engaged in this work for five years. From 1883 to 1889 Mr. Shankland made a reputation as an engineer in bridge work at Canton, Ohio. In the latter year he joined the staff of Burnham & Root in Chicago, designing the steel work for many of the modern skyscrapers in the country. In 1894 he became a member of the firm of D. H. Burnham & Company, where he remained until he entered into partnership with his brother. The specialty of the firm is the designing of steel work for modern buildings.

Mr. Shankland has received many testimonials of his ability. He has been awarded the Telford gold

medal and premium from the Institute of Civil Engineers for a paper read by him on "Steel Skeleton Structure in Chicago." Cornell College, Iowa, gave him the honorary degree of M. A. He is a member of the American Society of Civil Engineers, American Society of Mechanical Engineers, the Institute of Civil Engineers, Western Society of Engineers, Ameri-

EDWARD CLAPP SHANKLAND.

can Society of Testing Materials, and Franklin Institute. He is also a member of the University, Midday, Press and Engineers' clubs. He resides with his wife and three children at 4808 Champlain avenue.

Ralph Martin Shankland was born in Dubuque, Iowa, September 8, 1863. He was graduated as a civil engineer from the University of Michigan in 1888. In 1890 he came to Chicago and entered the employ of D. H. Burnham & Company. He remained there until 1898, when he formed the present partnership with his brother.

He is a member of the American Society of Civil Engineers, the Western Society of Engineers, Kenwood, Homewood, University and Midday clubs.

In 1894 he married and with his wife and one son makes his home at the Hyde Park hotel.

Thomas Elevator Company. The construction or material elevator is the mechanical heart whose throbs mark the life and growth of a modern skyscraper. The use and development of the elevator has accompanied and been a phase in the adoption of the present style of office building. Twenty-five years ago when buildings were few stories in height, elevators to carry materials and tools were unnecessary and unheard of. To-day, even the temporary disabling of a construction elevator means the halting of all work on the building.

The Thomas Elevator Company of Chicago is the pioneer in the devising, manufacturing and operating of such elevators. It was the first concern to perfect and install the electrical hoist, and there is hardly a large building in Chicago in whose construction this company has not assisted.

In the construction of the immense new plant of Sears, Roebuck & Company, thirty electrical hoists are now being operated by the company. This is the largest number ever in use in one building at one time and for their maintenance alone it was necessary that the elevator company install a sub-station at a cost of $4,000.

The Thomas Elevator Company has been operating since the Chicago fire in 1871. With the advent of the high building came the era of the steam machine hoist. Four years ago, realizing the possibilities of electrical appliances, the company began experimenting with electrical hoists, though to adopt them meant the discarding of more than one hundred steam engines. The electrical machine was found to be far superior in doing away with steam, smoke, water, grease and

E. A. THOMAS.

other dirt, and the engines were thrown away. The electrical hoists were first used in the construction of the Trude building. Since that time they have been used with absolute success in every large building in the down-town district.

They are operated at an average speed of one story per second—the top floor of a twenty-story building

being reached in twenty seconds. This means to the builder that his material arrives as promptly and his work is conducted as cheaply on the twentieth as on the second story. Contractors realize the vital character of the elevators and their stopping means the tie-up of the material and all the workmen on the building.

As a safety precaution a stringent rule is always enforced against carrying workmen on these elevators. The machinery is not rented to contractors but the elevator company receives a subcontract to furnish, install, maintain and operate these machines when a building is being constructed.

The steam hoists are still used on small buildings and outside of the business sections of cities. On some buildings even horsepower hoists are used. The first hoists a generation ago were operated by hand power, and still continue in use on small flat buildings.

The main office, factory and store house of the Thomas Elevator Company are at 113 to 115 South Hoyne avenue. A branch office for Chicago is at State and Fifty-first streets. In 1895 another branch office was started in New York, which has come to be one of the largest of its kind in the East.

E. A. Thomas, the head of the company, was born in Delavan, Wisconsin, March 19, 1850. He came to Chicago in 1871 and took a place with his brother, the late Charles E. Thomas, in the present business. Chicago has been his permanent home since that time. He has always taken an interest in the business affairs of the city and is a director of the Builders' Club and a member of the Chicago Athletic Association.

The Illinois Brick Company was incorporated March 31, 1900, under the laws of Illinois, to consolidate under one ownership and control the principal brick interests of Chicago. The properties acquired by the company embrace thirty-six brick-making plants, including those of the Hoyt & Alsip Brick Company, Alsip Brick Company, Purington-Kimbell Brick Company, Weckler Brick Company, Weckler-Prussing Brick Company, Wehl Brothers, Purington Brick Company, Thomas Moulding Company, Evanston Brick Company, Jefferson Brick Company, Bernard F. Weber, Harms-Schlake Brick Company, Will Brothers, Riemer, Labahn & Kuester, Henry J. Lutter, Wolff & Blaul, Robinson Brick Company, Gray Tuthill Company, J. Hundriser Company, Harland Brick Company, Shermanville Brick Company, Michael Myers, John Busse & Son and William Mensching.

The capital stock is $4,000,000, 6 per cent cumulative preferred, of which $3,550,500 was issued, and $5,000,000 common, of which $4,350,500 is outstanding. The preferred shareholders are entitled to priority as to assets.

The company has $370,000 trust deed obligations among its liabilities, and as an offset thereto has $300,000 bonds in the treasury.

The officers of the Illinois Brick Company are: President, George C. Prussing; vice-president, A. J. Weckler; secretary, W. E. Schlake; treasurer, C. D. B. Howell; auditor, Charles B. Ver Nooy. The directors are: Geo. C. Prussing, William Schlake, C. D. B. Howell, C. B. Ver Nooy, Wm. Legnard, Adam J. Weckler, Joseph Moulding, Phillip Lichtenstadt, D. R. Forgan, E. C. Potter, M. A. Farr.

Martin B. Madden's rise from a farmer boy to a member of Congress is a story of political and business success with few parallels. He was born in England, at Darlington, March 20, 1855. His father, John Madden, was one of the Third Estate and his mother, Eliza O'Neill, was descended of the ancient ruling family. The Maddens migrated to America in 1860, arriving at Lemont, Illinois. When Martin was six years old he was sent to the public schools, which he attended four years. In his early youth he worked on neighboring farms, the while attending night school.

His life was not particularly eventful, except for his marriage to Miss Josephine Smart of Downer's Grove, Illinois, in 1878, and his purchase of an interest in the Joliet Stone Company in 1881, until April, 1889, when his political endeavors commenced. He was elected alderman to represent the Fourth Ward, and two years later he was returned to his seat by the overwhelming majority of 1,500 votes. He served a third term from 1891 to 1893, his third election being marked by a 2,000 plurality. During these six years of public service Mr. Madden made an enviable record for himself. He was the chief sponsor for the civil service reform movement. The final passage of the Merit law, in 1895, during his fourth term, may be ascribed to his efforts. He accomplished much in the way of improving the city's finances, and also busied himself very largely with the traction problem.

Three times Mr. Madden was urged to run for Mayor, but he stepped aside for George B. Swift, whose ticket was successful by a majority of 4,000. He played a prominent part in the national campaign of 1896, probably the most memorable in history, when Bryan espoused the silver cause. As an orator of abilty, Mr. Madden was instrumental in making votes for McKinley and returning Illinois to the Republican ranks by a comfortable margin.

Business duties curbed his political activities for eight years following. He had become president of the Western Stone Company in 1891, and the concern had by this time grown to an enterprise of some magnitude. To-day it represents the consolidation of twelve distinct stone companies, and is one of the largest industries in the state. In this connection Mr. Madden's views

upon the trust and labor problems are interesting. He is himself a large employer of labor, in addition to being an organizer, and is consequently equipped to offer a solution for these economic questions. The remedy he suggests is to apply the national bank method of supervision to all trusts or combinations that make or handle articles of universal necessity, and having the states adopt similar methods of supervising local combinations.

In the national election of 1904, Mr. Madden, at a great personal sacrifice, accepted the nomination for Congress in the First district, where he was elected by a good margin in a hitherto Democratic stronghold.

Mr. Madden's success calls to mind a prophetic utterance of his mother, when Martin was yet in his teens:

"I have raised a son," she said, "who will not lie, nor take anything that does not belong to him, nor own anything that he has not paid for in full. He will not say anything against his neighbor, even if that neighbor be his enemy. He will not go into debt for himself. He will live on less than he earns and ever have money on hand to help himself and his friends along. He will all his days do for his employers more than he may be paid to do. He has a fine mind, a good tongue and a clean soul, and he will keep them that way as long as he lives, I know. He cannot easily be deceived, can take care of himself, and will never deserve any shame. He will rise from the time he left home and will not fall until he dies, and he will always stand up tall and straight among his fellow men. I am satisfied altogether with him and proud of what I have done in rearing him. The greatest statesman can do no more for the country than I have done in giving Martin to it—God bless them both."

The Meacham & Wright Company. The firm of Meacham & Wright, manufacturers' agents and dealers in hydraulic cements, stucco, etc., was organized in 1874 by Florus D. Meacham and Frank S. Wright. It is the sole distributing agents for the Utica Cement companies of La Salle County, Illinois, and its business ramifications extend to all points throughout the country where the Utica hydraulic cement has been known and used for upward of fifty years. The firm is likewise one of the largest dealers in imported and domestic Portland cements in the Central and Western states, and for years it has furnished the cementing material for a large majority of the celebrated engineering and architectural works executed in Chicago, St. Louis, Denver, Kansas City, St. Paul, Detroit, Cleveland, Indianapolis, etc., and for practically all the railroads radiating from Chicago. The well-known Utica cement, whose entire output of 3,000 barrels per diem is alone controlled and distributed by this firm through its Chicago and St. Louis houses, has been exclusively used since 1853 in the construction of the entire water supply and sewerage systems of the city of Chicago, and largely in its gas works and cable traction and other street railroad systems, and in its roadway and sidewalk paving foundations. On January 14, 1903, the firm was incorporated under the name of the Meacham & Wright Company. Its officers are Florus D. Meacham, president; Frank S. Wright, vice-president.

Florus D. Meacham, of the firm of Meacham & Wright, was born at Whitehall, Washington County, New York, on April 26, 1843. He is the son of Florus D. and Lucinda (Church) Meacham.

Mr. Meacham came to Chicago with his parents in 1857, and up to the time of the Civil war was engaged

FLORUS D. MEACHAM.

as a clerk in the offices of the Illinois Central Railroad. When the war broke out he would have been one of the first to enlist had he followed his own inclinations, but he yielded to the entreaties of his parents and remained at home. A year later, however, when it was found that the suppression of the rebellion was not to be as easy as was at first thought, a number of young men, composed for the greater part of employees of the large mercantile houses of the city, organized the Chicago Mercantile Battery. The name of Florus D. Meacham was on the enlistment roll, and he went to the front with others who had lain down their work that they might help save the Union.

Mr. Meacham served until the close of hostilities. In the first year of army life he took part in the Mississippi River campaign, and in the following year went through

the siege at Vicksburg from its commencement in the early spring until the final surrender on July 4. After the capitulation of this place he was with General Banks on the Red River campaign, and after this his battery was sent to New Orleans, and subsequently took part, under General Davidson, in the land operations against Mobile, which was among the last of the Southern ports to fall.

Returning to Chicago in 1865, Mr. Meacham was mustered out with the remaining members of his battery who had survived the three years of service in the field. Taking up civil life where he had left it, he was engaged in various mercantile pursuits until 1874, when, with Mr. F. S. Wright, he organized the firm of Meacham & Wright, dealers in Utica and Portland cements. This business has been very successful, and is by far the largest of its kind in the country.

Mr. Meacham is a Republican in his political affiliations, and, although he has never sought office, he was honored by the Republican County Convention of 1898 with the nomination for member of the Board of Review, to which position he was elected November 8, 1898, and reëlected in November, 1904. This office, which is one of the most important to the taxpayer, is the arbiter in all matters that pertain to both real and personal taxation, and his election was but a just recognition of his executive ability and his successful business career.

Mr. Meacham is a member of the Loyal Legion and of the Grand Army of the Republic. He is also identified with the Illinois and Lincoln clubs, and has a high standing among the business men of Chicago.

Frank S. Wright, of the firm of Meacham & Wright, is a native of the Badger State, having been born at Milwaukee, July 27, 1846. He is the son of Peter B. and Elizabeth (Ledden) Wright. Mr. Wright received his education in the common schools of his native city and in those of Sheboygan in the same state, to which latter place his parents removed when he was ten years of age. When he was fifteen, however, he gave up his studies and came to Chicago in search of work. His first employment was with the commission house of Shackford & How, afterward better known, perhaps, under the name of George M. How. Here he remained until the spring of 1867, when, although not yet of age, he formed a partnership with Mr. A. C. Scoville, under the name of Scoville & Wright, and engaged in the commission business at No. 44 West Lake street. This firm had a prosperous career until January 1, 1869, when Mr. Wright withdrew and entered the employ of Haskin, Martin & Wheeler, wholesale dealers in salt and cement. He remained with them until the formation of the present firm of Meacham & Wright, some few years later.

Mr. Wright is a strong Republican in his political views and a member of the Illinois Club. He takes much interest in the welfare of the fraternal order known as the Royal League, and as a member of its Supreme Council was very active during its early years in building it up and placing it on its present secure footing.

FRANK S. WRIGHT.

He was married January 4, 1866, to Miss Mercy A. McClevey, daughter of Colonel Smith McClevey of Chicago, and has a family of four daughters and one son.

The Northwestern Terra Cotta Company. It is not generally known that the majority of our great skyscrapers are built of clay. A visit to the immense plant of the Northwestern Terra Cotta Company, 1000 Clybourn avenue, will prove the truth of this, however. This company is the largest terra cotta concern in the world, in size as well as output. The plant covers about twenty acres of ground on the north side.

To see carloads of clay come in at one end and watch it through various metamorphoses, until it is shipped out as architectural terra cotta, of almost endless colors and designs and of a durability that will withstand the wear of centuries, is an interesting study. Coming into the plant, the clay is ground to a powder and then mixed with water until it becomes pliable and elastic. It is next put into molds of plaster of Paris. These molds have been made from models done in modeling clay by sculptors. Having received their forms in these molds, the pieces of soft clay are put into a drying room until all moisture has evaporated, leaving them hard and firm. The surfaces are then semi-glazed or enameled by being sprayed with a chemical mixture with compressed air. The material is then ready for the final process, that of burning. In great

kilns, of which there are twenty-six at the plant, each as large as a house, it is subjected to the constant heat of a roaring fire for seven days. The brick door of the kiln is gradually taken down when the fire is extinguished, the ware being allowed to cool for several days. The kiln is then opened and terra cotta, a material of high compressive strength and lightness, taken out, where clay had been put in. The inside of each block of terra cotta is hollow for brick filling.

In the thirty years the Northwestern Terra Cotta Company has been in existence it has furnished terra cotta for numberless skyscrapers and for government rotunda in cream-colored terra cotta, instead of marble. This work was done by the Northwestern Company as was the exterior of the Railway Exchange building.

The officers of the concern are skilled by long experience in the manufacture of terra cotta, dating back to the time of their predecessors, the Chicago Terra Cotta Company. The president, G. Hottinger, was a sculptor. John R. True, vice-president and treasurer, gained his first experience as a clerk, and F. Wagner, the secretary, was an architect.

Cameron L. Willey, importer, exporter and manufacturer of foreign and domestic hardwood lumber and

THE NORTHWESTERN TERRA-COTTA COMPANY'S PLANT.

and public buildings thoughout the country. Seven hundred and fifty employees, working in eight-hour shifts, make the plant a scene of industry, night and day. At the St. Louis Fair the products of the company received the grand prize, in a competition with seventy exhibitors. First awards were also received at New Orleans in 1884 and at Chicago in 1893. An interesting exhibit of the work done by the company is made at its branch office in the Railway Exchange building. The walls of the room are built of inlaid enameled terra cotta in an almost infinite variety of shades and colors. At the time the Railway Exchange building was erected an innovation was made in executing the veneer, is the proprietor and operator of the largest veneer plant in the world. His offices, yards, docks and factories are located at 1225 Robey street, south of Blue Island avenue. The eastern and export office is at 130 Pearl street, New York city; the foreign office is at No. 45 Exchange Chambers, Liverpool, England.

The Chicago business of C. L. Willey was established in 1891. Previous to that he had been in business for himself in Pittsburg, selling out his interests there in 1889. The Eastern business had been established in 1877 and grown steadily. After coming west, Mr. Willey pushed his plant forward until now it outranks all competitors and is the only one of five in the United States.

The ability to produce the choicest veneer is acquired only through long experience in manufacturing and by having access to a vast quantity of hardwood logs from which to make selection. The whole world is ransacked for the logs that are sawed in this mill, and constant

CAMERON L. WILLEY.

investigation keeps the concern in the foreground in advanced methods of manufacture.

Agents for Mr. Willey are constantly traveling through the United States and in foreign countries in search of material. He has just returned from an extended trip through Europe, where he studied the foreign methods of veneer manufacture. Mr. Willey personally supervises the opening and sawing of the logs for the finest and most costly veneer. There are few other industries in which quality is so flexible, or the matter of opinion so variable. Mr. Willey's method makes it possible to meet all requirements of the users of forest productions of the hardwood variety.

Mr. Willey was born in Dansville, New York, in 1855. His earlier education was secured in the schools of that town, and later he attended Duffs College at Pittsburg, Pennsylvania, graduating in 1871. His first practical business experience was secured in his father's saw and shingle mill at Warren, Pennsylvania, where he worked for seven years. When he had sufficiently mastered the trade to start business for himself, he moved to Pittsburg.

Mr. Willey's home is at 4750 Grand boulevard. He has one son, Charles B. Willey, who is now associated with him in business. He is a member of the Union League Club, the Chicago Athletic Association, the Washington Park Club and the Builders' and Traders' Exchange.

The John Spry Lumber Company, one of the largest and foremost in the West, was founded in 1885 as a successor to the Gardner & Spry Lumber Company, one of the pioneer lumber concerns of Chicago. The company's yards which have an annual capacity of sixty million feet are situated at Ashland avenue and Twenty-second street, over a half mile in length, and extending from the waterworks to the Chicago river's south branch. The business has expanded steadily since its inception and to-day the company's trade extends to every part of the United States.

John Spry, the founder and for many years president of the company, was a native of Cornwall, England, where he was born August 3, 1828. He came to America with his parents when a child. The Sprys located in Chicago, and John, at the age of thirteen, secured employment in the lumber yard of Andrew Smith. The position was humble, but the boy acquired a thorough knowledge of the business, which later qualified him for one of the principal factors of the American lumber industry. At the age of twenty-seven

SAMUEL A. SPRY.

he secured a working interest in the yard of F. B. Gardner, and in 1866, he became an active partner, organizing the firm of Gardner & Spry, with F. B. Gardner as senior partner. In 1869 it became the Gardner & Spry Lumber Company. When Mr. Gardner retired, in 1885, Mr. Spry reorganized the business as the

John Spry Lumber Company, which name has since endured.

Mr. Spry was prominent in public affairs, was one of the early members of the Board of Trade and was a leading Mason. After his death, which occurred in Chicago, February 5, 1891, his sons, John C., Samuel A. and George E. Spry, assumed control of the business. The first named, the eldest of the three children, was born in Chicago in 1857. After receiving an education in the public schools and a business college, he entered the employ of Gardner & Spry, working his way up to the presidency, which he assumed in 1891, after the death of his father. He was succeeded in 1900 by Samuel A. Spry, who had hitherto served as vice-president, while George E. Spry, the youngest son, who had been secretary and treasurer, became vice-president and treasurer.

In addition to their lumber manufacturing business the Sprys are largely interested in pine lands. Financially they are resourceful, while they are regarded as stimulating factors in the lumber industry.

The Reginald J. Davis Company stands at the head of the firms in Chicago which make a specialty of high-class interior finish work and building contracting. It was incorporated in 1900 by Reginald J. Davis and is a close corporation, being owned and controlled solely by Mr. Davis, its founder. Its work is to be seen in many of the largest and finest buildings of Chicago, among them being the Marshall Field new retail store at State and Randolph streets the Railway Exchange building at Jackson boulevard and Michigan avenue, the Heyworth building at Wabash avenue and Madison street, the First National Bank building, and in many of the finest residences in Chicago. The firm's reputation has extended all over the country, so that it is frequently called upon to bid upon out-of-town structures. At present it is engaged upon the contract on the new San Francisco Chronicle building, San Francisco, California. The company has its offices at 1451 Railway Exchange building and it operates three factories in Chicago, located at 2300 to 2310 La Salle street, 22 and 24 South Jefferson street and 2253 to 2257 Wentworth avenue.

Reginald J. Davis, the president of the company, is known as one of the experts in the line of interior finish in the United States. He was born August 18, 1848, in South Wales, England, and learned his profession in the old country, serving a long indoor apprenticeship and perfecting himself in the many branches which have proved so useful to him in his subsequent career. His apprenticeship covered the technical as well as the practical side of his profession and he took the first prize in his examination at the London Technical School, receiving a percentage of 97 out of a possible 100. He came to the United States in 1878 and settled in St. Paul. He came to Chicago in 1882, and speedily forged to the front as a contractor. His incorporation of the firm of R. J. Davis & Company was the result of close application to business and taking advantage of the opportunities for fine work when Chicago took the lead in the erection of skyscraper buildings. Mr. Davis

REGINALD J. DAVIS.

is independent in politics, is a Royal Arch Mason, a member of the New Illinois Athletic Club and of the Hinsdale Golf Club. He was married in the old country previous to coming to America, and leads a quiet life at his home at 945 Sawyer avenue.

Arthur Nollau, of the Nollau & Wolff Manufacturing Company, was born in Manitowoc, Wisconsin, in 1859. He is one of the best known manufacturers of general millwork and interior finish of the Middle West. Some of the most modern and handsome buildings in Chicago and vicinity have been fitted with the products of his firm. He began his successful career as a cash boy in a Manitowoc general merchandise store, but soon was promoted to clerk, and later to bookkeeper. With his savings he came to Chicago in 1884 and formed a partnership with Otto E. Wolff under the firm name of Wolff & Nollau. Their plant is located at 35 to 45 Fullerton avenue, covering half a block. It has gradually increased from a small factory employing 20 men to their present capacity of 200 men. In 1900 the firm was incorporated as the Nollau & Wolff Manufacturing Company. The floor space of the present factory is more than 48,000 square feet, not including drying kilns, engine rooms, large lumber yards and the

offices. The plant of the Nollau & Wolff Manufacturing Company is to-day considered one of the best equipped and best located for interior finish and general millwork in the United States.

The new Chicago & North-Western Railway's office building at Jackson boulevard and Franklin streets, the Majestic theater and office building on Monroe street

ARTHUR NOLLAU.

near Dearborn street and Sears, Roebuck & Company's new plant at Hamlin and Harvard streets are among the recent structures in which the Nollau & Wolff Manufacturing Company furnished all the millwork and interior finish.

Mr. Nollau is a member of the Chicago Athletic Association, a prominent Mason and a member of several other organizations and fraternities.

B. F. Weber is a native Chicagoan, born January 6, 1853, at a date when the population of the City of Chicago scarcely exceeded 50,000 souls. He is the son of Michael and Anna M. Weber, pioneer settlers of the city. He acquired a practical education in the public schools, and in Dyrenfurth College. Upon attaining his majority he engaged in the real estate and loan business on his own account, having offices in the Ewing block, and has since been interested in the business, being the senior partner of the firm of Weber, Kransz & Company, located since 1881 at 84 La Salle street. He is one of the original fifty members of the Chicago Real Estate Board, and still remains a member. In 1889 he extended his business operations to include an interest in the Jefferson Brick Company, of which he was the president, until the formation of the Illinois Brick Company, which combination was effected in April, 1900.

In 1891 he organized the Weber-Labahn Company, of which he was president until he disposed of his interest and established his own works, which for many years was the model yard of the Illinois Brick Company, known as Yard No. 5.

Mr. Weber was vice-president of the Illinois Brick Company until his resignation in February of this year, when he resigned to accept the presidency of the National Brick Company, recently organized with a capital of $500,000, now erecting plants at Weber Station, Illinois, on the Chicago & North-Western Railway, Maynard, Indiana, and Chicago Heights, Illinois. When completed, the company will have a capacity of 1,250,000 brick per day, the largest output of any establishment in this line in the world, not a trust or a combination. The company's offices are at 84 La Salle street.

While engaged in the brick business, Mr. Weber did as much to develop and improve the territory between Chicago and Evanston as any one man. As a

B. F. WEBER.

builder, he erected within the past three years over 200 first-class residences within the territory from Graceland avenue on the south, to, and including Rogers Park on the north. He has improved miles of streets with first-class paving and sidewalks and all underground improvements. Many tracts of highly improved property are the best testimonials of his efforts.

He has also built several miles of railroad extending

from Oakton avenue to Peterson avenue along the township line between Evanston and Niles. This territory owes its appreciation in land values solely to his efforts, being formerly one vast unimproved semi-wilderness. It now has large manufacturing plants employing a thousand or more people.

Mr. Weber has entirely withdrawn from public affairs in which he formerly took considerable part, having served in both the Thirty-second and Thirty-third General Assemblies as representative from the old Sixth senatorial district, which comprised all the towns in Cook County outside of the then limits of the City of Chicago. He also served two terms as assessor and member of the board of trustees of the Town of Lake View, and was elected and served two terms in the city council, after the annexation of Lake View to the City of Chicago in 1895. He was appointed election commissioner by Judge Scales, which office he subsequently resigned to accept from Governor Altgeld a place on the Lincoln Park Board.

Mr. Weber was married October 14, 1884, to Miss Anna M. Kransz, daughter of Nicholas Kransz, one of the earliest settlers and prominent citizens of Lake View. This union was blessed with seven children, three of whom are deceased. Those living are: Clarence J., Cassius M., Cressie O., and Bernard F., Jr. He is a member of Our Lady of Lourdes parish, of which he is a regular attendant, belongs to North Shore Court, Catholic Order of Foresters, and is also a member of the Knights of Columbus.

Mr. Weber is a member of the Ravenswood Club, Illinois Athletic, and other social organizations.

Rudolph S. Blome, senior member of the well-known firm of Rudolph S. Blome Company, cement paving and concrete contractors, is one of the best examples of what a young man possessing business ability can accomplish in the metropolitan city of the West. The adage of "young blood will tell" seems to be especially appropriate in this instance, for although only slightly more than thirty years of age it is his energy that has been the life of the firm ever since he became connected with it.

Mr. Blome was borne at Monroe, Michigan, in 1871, and after graduating from the local high school, completed his studies in the University of Michigan at Ann Arbor, following which he pursued further work at the University of Detroit. He then came to Chicago to become identified with Mr. Joseph Stamsen in the cement paving business and in 1894 entered into partnership with him under the firm name of Stamsen & Blome.

Upon the death, in 1896, of Mr. Stamsen, Mr. Blome became sole proprietor of the business and later changed the firm name to Rudolph S. Blome Company, and in January, 1904, gave an interest to Mr. William Sinek, who had been with the concern a number of years.

Since Mr. Blome's connection with the business this firm has executed nearly all of the larger contracts of cement floors and sidewalks, concrete foundations, and other forms of concrete construction in and about Chicago. The field of operations has extended as far north as Hamilton, Canada, east to Washington, D. C., south to Alabama and west to Salt Lake City, and the number of men employed increased from ninety in 1894 to as high as fourteen hundred in 1904.

Some idea of the magnitude of the operations of this concern may be gained from the fact that during the greater part of the season of 1904 they were at work in

RUDOLPH S. BLOME.

twenty-two cities outside of and in addition to Chicago. Also, while the laying of cement sidewalks is but one of the many forms of concrete work they execute, the firm has built more cement sidewalks than any other concern in the world, aggregating on December 31, 1904, slightly more than 26,000,000 feet.

The firm occupies large and well-appointed offices on the bank floor of the Unity Building, 79 Dearborn street, where all business comes under the personal supervision of Mr. Blome. It may here be remarked that the success and envied reputation of this firm are partially due to the fact that they solicit and execute a first-class and superior grade of work only, as is proven by the vast amount of their work now in use. Mr. Blome is, and has been for three successive terms, president of the Chicago Concrete Contractors' Association.

He is also a member of the Builders and Traders Exchange, and the Union League, Germania Männerchor, Illinois, Athletic and Marquette clubs.

The Palmer House, located at State and Monroe streets in the heart of the retail business district, maintains its position as one of the leading hotels of the city, despite the fact that it was built more than thirty years ago. Massive in size and built of the finest materials, mere alterations have been found necessary to keep it up to the standard of the hotels more recently erected.

PALMER HOUSE.

Within the last ten years the dining rooms have been remodeled, an electric light plant installed and a large laundry established in the basement. The parlors have been redecorated frequently and many fine paintings added to the collection that was already on the walls. Only recently a new heating plant was established in the basement and a telephone system with wires connecting with each of the guest rooms installed.

The spacious main dining room on the parlor floor of the hotel, famous in years gone by, is perhaps the scene of more large banquets than any other room in Chicago. The club rooms are also a favorite place for conventions of various mercantile associations. With its 781 guest rooms, the hotel ranks as one of the largest in America.

Since the death of Potter Palmer a change has been made in the system of management. The Chicago Hotel Company, organized in 1904, leases and conducts the house. Willis Howe, for many years manager of the house, was the first president of the Chicago Hotel Company and continued in charge of the house until the spring of 1905. After his retirement, W. C. Vierbuchen, for many years head clerk in the hotel, was elected president of the Chicago Hotel Company and manager of the house. Mr. Vierbuchen still retains the position.

The history of the hotel is known to most Chicagoans. Work on its construction was begun before the great fire of 1871. When it was up to the first floor it was destroyed with many of the neighboring buildings. With renewed energy Mr. Palmer began again the construction of one of the best and most costly hotels in America. The hotel was completed in the fall of 1873.

The Auditorium Hotel opened a new era in hotel construction in America. Until the granite pile had been built at the northwest corner of Michigan boulevard and Congress street, there was not an entirely noncombustible hotel in the country. For nearly twenty years previous to the opening of the hotel in 1890, there had been no advancement or improvement in hotel construction in Chicago, and it was not until after that date that the first fireproof and thoroughly modern hotel was erected in New York City. The Auditorium was, therefore, in a sense, the pioneer of the great, magnificent, indestructible, palatial hotels of America.

Not only was it, when first completed and opened, a magnificent hotel far superior to anything the United States had seen up to that time, but it contained many other than the hotel features and some of them were of an exceedingly important and interesting character.

The Auditorium Hotel was so named from the fact that the building contains under the same roof with the hotel, an auditorium for public gatherings which is, in fact, the largest and finest opera house or theater west of New York City. The fact that patrons of the Auditorium Hotel may attend the opera or other entertainment in the Auditorium theater without stepping out of doors is of such importance as to need only passing mention.

Other features of the original Auditorium building include a banquet hall on the sixth floor, which is regarded as the most beautiful room of its kind in the United States, and the grand dining room on the tenth floor which is even larger than the banquet hall, and is also frequently used for banquets. Other dining facilities of the Auditorium proper include a large restaurant on the ground floor, and a grill room which was the first to be opened in Chicago.

The World's Columbian Exposition made the erection of an additional building necessary and in 1892 ground was broken at the southwest corner of Michigan avenue and Congress street, and the construction was begun of the hotel which has since become famous all over the world as the Auditorium Annex. This is a much larger hotel, so far as the number of rooms is concerned, than the original Auditorium, and the entire structure is given up to hotel purposes.

AUDITORIUM HOTELS.

The Auditorium Annex is connected with the Auditorium proper by means of a white marble tunnel directly underneath Congress street. Thus it is that the patrons of the Auditorium Hotel, the Auditorium Annex, the Congress Apartments, the Auditorium Theater and Fine Arts building are easily enabled to intermingle, passing from one great structure to the other and enjoying all the privileges and features of each without stepping out of doors.

So great has been the success of the Auditorium Annex that a still further enlargement of this magnificent hotel was found necessary, and in the spring of

1902 the erection was begun of the building known as the Congress Apartments.

The greater portion of the first floor of the new building is given up to the Pompeiian room, which, since its opening last autumn, has become known from one end of the country to the other as an apartment of surpassing grandeur and artistic beauty, the counterpart of which has never been heretofore encountered in hotel construction or equipment. The prominent feature and chief attraction of this room is the celebrated Tiffany fountain, which was on exhibition at the Pan-American Exposition in Buffalo and was considered by many visitors as one of its most attractive features.

The location of the Auditorium Hotel and its annexes is superb. Facing Lake Front park, near the northern terminus of Michigan boulevard, and overlooking the broad expanse of Lake Michigan, its surroundings and environments are such as no other hotel, located close to the business center of a great city, can offer.

The Congress Hotel Company has recently acquired the two lots adjoining its property on the south, and known as Nos. 228 and 229 Michigan avenue. It is intended to erect on these lots a building to be operated in connection with the Annex hotel. This building will contain about 150 guest rooms, a magnificent banquet hall and assembly rooms. A large portion of the first floor will be used to enlarge and add to the present Pompeiian room. This new building will be built on a magnificent scale, in keeping with the Congress Hotel Company's properties.

R. H. Southgate is president of the Congress Hotel Company, which owns and manages the three properties. A. G. Bullock is the vice-president and Thomas H. Joyce, secretary and treasurer. The board of directors consists of R. H. Southgate, J. Frank Lawrence, G. B. Shaw, R. H. Southgate, Jr., J. H. Breslin, A. G. Bullock and E. H. Carmack.

R. H. Southgate is the general manager of all the properties. W. S. Shafer is assistant manager in charge of the Auditorium Hotel and J. E. Kennedy, of the Annex.

The Great Northern Hotel is one of the best equipped and most centrally located hostelries in the city. Convenient to the business districts, both wholesale and retail, all elevated and steam railway stations within easy reach, and near to the theaters, it has become the recognized headquarters of commercial men, and popular with the traveling public generally.

It is a fourteen-story fireproof structure, fronting on Jackson boulevard, Dearborn and Quincy streets, with 400 rooms, 250 of which have bathrooms connecting. There are more rooms with connecting bathrooms at the Great Northern than at any hotel in the city. The hotel was opened in 1892, and the number of guests since then have averaged 400 a day.

At the present writing, improvements costing over $140,000 are being made throughout the house. A new kitchen, the finest in the city, done in white tile, has recently been completed. All employees in the kitchen are dressed in spotless white uniforms, giving a general aspect of cleanliness not generally met with in the kitchens of big hotels and restaurants. The hotel is run strictly on the European plan. A café on the parlor floor and a grill room in the basement furnish ample accommodations for those guests who wish to take advantage of the excellent cuisine of the Great Northern. A banquet hall on the parlor floor has recently been opened.

GREAT NORTHERN HOTEL.

Besides the usual equipment of the modern hotel, every room in the Great Northern is equipped with a long distance telephone, an advantage which only a few other hotels in the city have. What is said to be the finest and most complete barber shop in the country, a system of compressed air cleaning throughout the house, and an $18,000 Æolian organ in the lobby on which nightly concerts are given, are but a few of the features which attract the wayfarer to the Great Northern.

MAJESTIC HOTEL.

The basement of the hotel presents a busy scene, where new boilers and an improved system of heating are being installed. A new electric light plant has recently been finished.

Hotel Majestic is located in Quincy street, between State and Dearborn streets, 150 feet from the main Dearborn street entrance of the new Chicago postoffice. The hotel is a model steel structure and absolutely fireproof. Built in the form of a quadrangle with halls running lengthwise, every room is an outside room, insuring fresh air and sunshine to every patron. All the bathrooms are beautifully finished with tile and furnished with porcelain bath tubs, marble wash stands and nickel trimmings. Each room is provided with a long distance telephone, is steam heated, lighted by electricity and furnished with hot and cold water taps. It is no exaggeration to say that the Hotel Majestic is one of the most desirable of Chicago's down-town hotels. The 200 rooms are unexcelled in Chicago for size and elegance of appointments, light, ventilation and general desirability. The rates at this hotel are extremely reasonable considering the nature and quality of the accommodations provided. At the top of the house there is one of the most beautiful restaurants in Chicago, St. Hubert's Inn. Situated as it is on the seventeenth floor, it affords the visitor a splendid view of Chicago, Lake Michigan and the surrounding country.

Hotel Majestic is adjacent to the great down-town shopping district. All street car lines pass within one to three blocks and the Board of Trade, Stock Exchange, banks, large office buildings, and the main jobbing houses of Chicago are within easy walking distance, making it one of the most desirable hotels in Chicago for patrons to whom time is a valuable consideration.

A modern compressed air vacuum system of dustless cleaning is used at the Majestic. It has a stationary air-compressing plant in its basement, with standpipes connecting all floors. By this method all the rooms in the hotel are kept sweet and clean and sanitary. All the carpets, rugs, draperies, upholstered furniture, pillows, mattresses, etc., are renovated and cleaned with the compressed air vacuum system. "Fresh Air" is the motto of the Majestic. The perfect ventilation of every room is further enhanced by the use of pure atmosphere in removing all dust and microbes, producing a sanitary condition that can be attained in no other manner.

CHAPTER XXIV.

PROMINENT MEN, PAST AND PRESENT.

CYRUS HALL McCORMICK, inventor, manufacturer and benefactor, was born February 15, 1809, at Walnut Grove, Rockbridge County, Virginia. The surroundings of his early life were extremely picturesque, the Blue Ridge towering above the valley to the east, the Alleghanies not far away on the west, and the valley itself presenting a panorama of fields and waving grain, interspersed with streams, hills and comfortable homes. Such environment, and the inherited genius of his father, together with the practical ability of his mother, all combined to fit him for his life task.

His father, Robert McCormick, was a farmer, possessing one thousand eight hundred acres of excellent land, upon which he operated, in the patriarchal fashion of the South, a number of industries, including a flour mill and saw mill, and a carpenter and blacksmith shop. Characterized by tireless industry and imbued with mechanical talent, he invented a number of devices to simplify the labors of the farm, including a hemp break, a threshing machine and a tub-shaped bellows for the blacksmith shop. The idea of constructing a reaping machine as a means of saving much of the heavy work and time consumed in harvest had engaged his attention for many years. In 1816 he made a crude machine in his own shop, in which he sought to obtain his object by means of a row of upright cylinders, armed with sickle blades, rotating against a stationary cutting edge. The several stalks fell on leather straps, which carried them to one side and threw them on the ground. The contrivance illustrated the inventor's ingenuity, but was not operative, and after another unsuccessful trial in 1831 it was abandoned.

The son, Cyrus H. McCormick, who had gained partly by inheritance, partly by practice, a love for the mechanical arts, watched his father's experiments and mechanical work in many lines with a boy's interest. He attended an old field school every winter, and in the open months of the year learned, by his own experience in the work of the farm, the importance of a machine which would relieve the husbandman of his heaviest toil in harvest time.

At the age of fifteen he constructed an ingenious, light and symmetrical grain cradle, which enabled him to keep pace in reaping with the workmen.

In 1831 he patented a hillside plow, to throw a furrow alternately to the right and left, and in 1833 another improved plow, which he called "self-sharpening."

The father's experimental reaping machine, laid by, was a familiar object to young Cyrus in his early years, as he has often said. In 1831 Cyrus H. McCormick, filled with the idea of a successful reaper, conceived a machine upon an entirely different plan, and with remarkable energy constructed it and tried it in the field during that harvest. The operation was successful and the machine thus brought forth, by meeting the difficulties which had baffled previous efforts, determined the line of future development of harvesting machinery. So well had he wrought that the essential features of the first reaper have never been departed from. The inventor used in this machine the vibrating blade, operating in fingers, or supports, to the grain being cut, a principle which has been retained throughout the development of the reaper. The platform for receiving the cut grain after it had been severed by the cutting apparatus, and from which it was raked to the side in gavels, ready to bind, remains the same in principle to-day. The necessity for the reel to bring the standing grain to the knife, and finally incline it upon the platform, was also recog nized in this first machine. The divider also was made

a part of this machine, to meet the difficulty found in separating effectively the grain which was cut from that left standing. The construction upon two wheels, like a cart, thus avoiding the awkwardness of some previous attempts, has been preserved, as well as the concentration of most of the weight of the machine upon the driving wheel, a feature which is readily seen by the practical man to be important.

Much thought and repeated improvements during the first twenty years had combined to produce a machine that, when exhibited at the World's Fair in London, in 1851, astonished the world and saved the American exhibit from being regarded as commonplace, although the London Times had ridiculed the McCormick reaper before the exhibition as a "cross between an Astley (circus) chariot, a wheelbarrow and a flying machine." It was compelled to acknowledge, after a test had been made in the fields, that this machine was "worth to the farmers of England the whole cost of the exhibition." Writing of this glorious success, Honorable William H. Seward said: "So the reaper of 1831, as improved in 1845, achieved for its inventor a triumph which all then felt and acknowledged was not more a personal one than it was a national one. It was justly so regarded. No general or consul, drawn in a chariot through the streets of Rome by order of the Senate, ever conferred upon mankind benefits so great as he who thus vindicated the genius of our country at the World's Exhibition of Art in the Metropolis of the British Empire in 1851."

CYRUS HALL McCORMICK.

Important improvements were added to Mr. McCormick's machines, and they constantly led in the race to produce the best machines for reaping the great harvests of the world. The raker and driver had been given seats on the machine by 1847, and the one was relieved of the drudgery of walking and the other of riding a horse. In 1858 experiments were made with the self-rake of McClintock Young, and machines with this invention were put upon the market in 1860. Scylla & Adams had in 1853 conceived the idea of making a machine upon which the binders could ride. Marsh Brothers further improved this in 1858, and Mr. McCormick had such a machine on the market in 1873, but not much was done with this, for he had experimented with a wire binder in 1872, and had such harvesters ready to sell in 1875. The twine binder was already planned, and he began to supply them to the trade in 1881.

When Mr. McCormick thus saw the modern machine develop from his original invention, he built up a manufacturing business for the introduction of his reaper to the markets of the world, and thus guided its subsequent development to meet the demands of each successive period. He had the satisfaction of developing in this manner the largest business of its kind in the world. In nearly every national and international exhibition of the century, Mr. McCormick's reaper was awarded the first honor, and he himself was the recipient of many marks of distinction. From the first machine of 1831 up to the latest Right-hand Automatic Binder of 1900, there has been a gradual evolution in the McCormick machines, so natural, so important and so far-reaching in their benefits to bread winners, as to place his name high on the roll of the illustrious men of our land. But his life-work would not be adequately apprehended if we should stop here. He was a philanthropist and benefactor as well. In 1859 he proposed to the General Assembly of the Presbyterian Church to endow, with $100,000 the professorships of a theological seminary, to be established in Chicago. This was done, and during his life-time he gave about half a million dollars to this institution, the Presbyterian Theological Seminary of the Northwest, now McCormick Theological Seminary. The McCormick professorship of natural philosophy in Washington and Lee University of Virginia, and gifts to the Union Theological Seminary at Hampden-Sidney, and to other colleges under Presbyterian influence, also attest his solicitude for the church in which he had been reared, and of which he had been a member since 1834. In 1872 he came to the aid of the struggling organ of the Presbyterian Church in the Northwest, The Interior, and used it to foster union between the old and the new schools in the church, and to aid in harmonizing the Presbyterian Church in the Northwest. Under his care and advice The Interior

grew to be a mighty voice, expressing the convictions, the aspirations and hopes of a great church.

In 1858 Mr. McCormick was married to Miss Nettie Fowler, a daughter of Melzar Fowler of Jefferson County, New York. Seven children were born to them, of whom five are yet living. Mr. McCormick died May 13, 1884, in Chicago, leaving an honored name to his family.

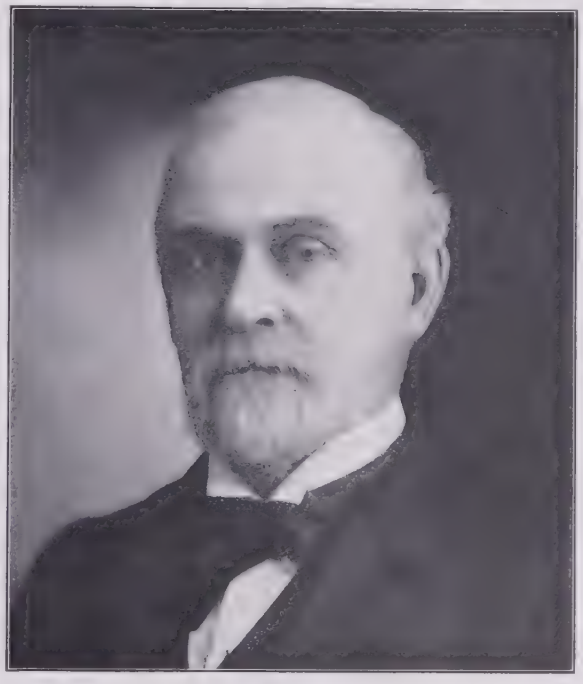
Potter Palmer is one of the best known names in Chicago. So closely was Mr. Palmer identified with the early growth and development of the city that there is hardly a landmark in it that does not bear his signet. For fifty years he was a conspicuous figure in the history of the city and its leading commercial character.

He was born in Albany County, New York, May 20, 1826, the son of Benjamin and Rebecca (Potter) Palmer. He was a descendant of Walter Palmer who was a companion of John Endicott, colonial governor of Massachusetts, 1629, who later settled at Wequetequock, Connecticut, the scene of present day re-unions of the Palmer family. Mr. Potter's early ancestors in America were attracted to the sea. Many of them were established at New Bedford, Massachusetts, where they were engaged in foreign commerce. Three members of the family were lost at sea in one year and this so shocked the others that they abandoned the sea. The direct ancestors of Potter Palmer moved from New Bedford to Albany County, New York, in the early part of the nineteenth century, where they became prominently connected with the affairs of a growing community. Benjamin Palmer, father of Potter Palmer, engaged in stock raising, and at one time owned three large stock farms. He married Rebecca Potter, daughter of Samuel and Deborah (Ricketson) Potter.

Potter Palmer, the fourth son of this marriage, lived with his parents until he was seventeen years old, when he left home for the purpose of learning the ways of commerce with his father's promise that as soon as he demonstrated his ability he would supply him with the needed capital to start him in business. His first work was as a clerk in a country store, postoffice and bank at Durham, New York. Here his abilities won speedy recognition and at the end of two years he was given entire charge of the establishment.

Shortly thereafter he started a dry goods store in Oneida, New York, which he later disposed of to open a larger one in Lockport. He chafed under the stagnancy of small towns and the limit on his capacities, and he determined to seek a larger field for his efforts. He first thought of going to New York, but the wonderful progress then being made in the Middle West attracted him and after a visit to Chicago in 1852 he decided to move here and establish himself as a dry goods merchant. After selling out his business in Lockport and adding the capital given him by his father, he purchased a stock of goods in New York and opened an establishment in Lake street, which was the foundation of the immense fortune he amassed and the cornerstone of the business integrity of the city. His store prospered and the name of Potter Palmer became known throughout all the territory tributary to Chicago, and was a synonym for honesty and fair dealing everywhere. His business was founded upon his known insistence upon generous dealing and full value in return for the money of customers.

Many innovations in the business of retailing dry goods were inaugurated by the young merchant, and though they were bitterly opposed by his competitors



POTTER PALMER.

all of them have since been adopted and though they worked a revolution of the business modern retail dry goods merchants the world over acknowledge the wisdom of them.

Mr. Palmer was the first to start the bargain day. He was the first to set aside certain days for the sale of certain articles. He was the first to adopt the plan of exchanging goods or refunding money to customers who were not satisfied. He was the first to start the general and extensive advertising that is now a feature of all retail dry goods houses. He was the first to arrange show windows and dress and decorate them. He was the first to inaugurate the system of delivering goods to the homes of customers.

These innovations rapidly drew trade to his store and while his competitors opposed him they were one by one compelled to follow. Under this plan of deal-

ing the Potter Palmer establishment soon became known as the largest of its kind in the northwest country and the mere association of the name of the firm with the name of the city resulted in a greater confidence being placed in the plans proposed by the growing metropolis of the West and contributed in itself largely to the development of the place. The head of the firm of Macy & Company of New York, heard of the business plans of the young Chicagoan and a special agent was sent to Chicago to study them. On his return the New York house immediately adopted them and after a few years the same plans were being put into practice in London, Paris and Berlin.

Through all Mr. Palmer's career he never had a business partner. All his work was accomplished alone and it stands a monument to himself. The arduous labors spent in the building up of his business and in helping the city generally on its road of progress told on the remarkable abilities in the end, however. The physical and mental structures were not able to withstand the strain, and in 1867, on the advice of physicians, Mr. Palmer gave up his business and devoted several years to rest and travel.

The business he had built up was turned over to Marshall Field and Levi Z. Leiter, and, in order that they might begin where he left off, under the most auspicious circumstances, the retiring founder of the firm left them his name and part of his capital. For several years the business was conducted under the old title, or until they were able with their own resources to control the business.

After nearly three years spent in travel Mr. Palmer returned to Chicago, bettered in health and eager to get into the world of affairs once again. Still acting under the advice of his physicians, he decided he would not take up the more confining and arduous labor of his old business, and he determined to turn his millions into real estate. It was this decision that has resulted in a greater good to Chicago than the decision of any other one man.

State street then was a narrow, ill-kept and unsightly thoroughfare. The main street of the city was Lake street. As his far-seeing judgment told him the best foundation upon which to build his dry goods business, an equal prescience told him that if Chicago was to grow ,its main thoroughfare must run parallel with the Lake Front, and he set about the task of turning the tide of the city's business from east and west to north and south. He bought the land on either side of State street for more than a mile, fought through the city council a bill widening the street twenty feet and providing for its paving, and he then used his surplus capital in erecting one after another the finest commercial buildings the city had then seen. The irregular, poorly-built structures gave way to the handsome new buildings, the narrow ill-drained street was widened into the State street of to-day, and as if by magic the commercial enterprises on Lake street turned to the new thoroughfare and in the space of a few years the whole tide of the city's business had been turned into a new and better channel.

Then came the fire of 1871, and the flames swept out the patient work of years. When the fire had at last been extinguished the general scene of devastation seemed to spell ruin for the man whose millions had been swept away as well as for the city itself. With equal courage, however, the man and the city turned to the work of rebuilding. Though the fire had destroyed in all thirty-two buildings belonging to Mr. Palmer, his credit enabled him to borrow $1,700,000 from the Mutual Life Insurance Company of Connecticut, the largest sum that had till then been loaned by that company, and with his new capital he set about building even finer structures in the place of those destroyed. The State street of to-day speaks eloquently of his success.

The turning thus of the entire life of a city was not the only achievement of the man. After he had accomplished that he spent thousands of dollars in the purchase of the then waste and swamp lands north of Chicago avenue and east of Rush street. In a few years he had turned the swamps and sand dunes into the most valuable property district in the city. It bordered the Lake Front and was bounded on the north by Lincoln Park and to the south abutted the expanding business district of the city. The Lake Front was parked and inside it the beautiful Lake Shore Drive was laid out and the homes of Chicago's wealthiest and most exclusive now border it, facing the lake and looking upon the same scene toward which Mr. Palmer faced his own magnificent residence, almost midway between the ends of the fashionable driveway.

In 1871 Mr. Palmer married Bertha, daughter of Henry H. Honore, a prominent capitalist and real estate holder of Chicago. Through all his efforts in the building up of the city she was his constant aid and it was largely through her encouragement that the hard days following the fire were safely bridged. By his marriage he had two sons, Honore and Potter Palmer, who have both risen to prominence in the life of the city.

During his long years there were few projects of worth that did not receive his support, and that support was usually material. He was an incorporator of the Chamber of Commerce, an early member of the Chicago Library Association and one of the first subscribers to the Chicago May festivals. He was one of the three founders of the Chicago Interstate Industrial Exposition and vice-president and director of the World's Columbian Exposition, to which he contrib-

uted both time and money and through his efforts it was crowned with success. Mrs. Palmer was chief of the Women's Commission of the fair and contributed largely to the success of the enterprise.

Though he was always keenly interested in matters of public welfare and took an active part in them when it was for the interest of Chicago, he did not care for the distinction which comes from holding public office. He preferred the pleasure of accomplishment more than the honor of mere position. In 1870 he declined the Interior portfolio in President Grant's cabinet. On many other occasions he was offered positions of political honor, but he declined them all. His one position that might be called political was as commissioner of the South Park board. That he accepted in order that he might be instrumental in beautifying the south end of the city by laying out a splendid boulevard system in that section of the town. The result of his work speaks for itself. It was largely through his efforts that Chicago can now boast of the finest park system in the world, and in the most complete boulevard system connecting all the parks in a continuous driveway.

No man ever worked more for the joy of working and less for self-aggrandizement. He died in Chicago, May 4, 1902.

Philip Danforth Armour, son of Danforth and Julianna (Brooks) Armour, was born at Stockbridge, Madison County, New York, May 16, 1832. His parents, who were farmers, gave their family of six boys and two girls such educational advantages as were to be obtained in the near-by country schools, and some of the children also attended a neighboring village seminary. Among them was Philip, and many anecdotes have been told of his boyish pranks while a student at that institution.

During the winter of 1851-52, Mr. Armour was one of a small party that succumbed to the California gold craze, and in the early spring of 1852 this band of goldseekers began their journey toward the far West. Six months later they reached their destination, having traveled by the overland route, and encountering all the hardships incident to making the trip in this manner.

Mr. Armour returned to the East in 1856, after having had a varied experience in mining enterprises, and it was conjectured at the time that he brought back with him considerable of the golden dust, but the facts of this interesting matter are known only to himself. He devoted a few weeks to visiting his parents, after which he again started West, this time locating in Milwaukee. Here he formed a partnership with Frederick B. Miles in the commission business. This firm continued until 1863, when Mr. Armour became associated with John Plankinton in the pork-packing industry. This venture was probably the turning point in Mr. Armour's career, since Mr. Plankinton had for many years been connected with Frederick Layton, one of Milwaukee's pioneer residents, and not only stood high and commanded the respect of the citizens of Milwaukee, but had also built up an industry of no small magnitude. This partnership enjoyed a thriving business, and the fluctuations in the price of provisions at the close of the war left the firm a fortune.

Mr. Armour's brother, Herman O. Armour, had established himself in Chicago in 1862 in the grain commission business, but three years later he was induced to surrender his interests here to a younger brother, Joseph F. Armour, and take charge of a new firm in

PHILIP DANFORTH ARMOUR.

New York, under the name of Armour, Plankinton & Company. The firm name of H. O. Armour & Company was continued in Chicago, however, until 1870. They continued to handle grain, and commenced packing hogs in 1868. This part of the business, however, was conducted under the firm name of Armour & Company, and in 1870 the firm of Armour & Company assumed all the business transacted at Chicago.

In 1871, in order to keep abreast of the demands of the market, the firm of Plankinton & Armour was established at Kansas City, under the charge of Simeon B. Armour, and in 1875 Philip D. Armour came to Chicago, where he resided until his death, January 6, 1901. Mr. Armour gave largely of his wealth to various charitable and educational institutions, to say nothing of his numerous gifts toward other worthy enterprises, and the various other endowments of which no public

mention has been made. In 1881, upon the death of his brother, Joseph F. Armour, he was given charge of a trust of $100,000, with which to found an institution whose purpose should be to reach the people with the teachings and influences of the gospel of Christ, and to insure the care and development of the children and youth of that part of Chicago where it should be located. Mr. Armour took his brother's bequest as a suggestion, and his benefaction has multiplied the amount many times, his own gift reaching the sum of two millions of dollars. The result has been, not only the building of the Armour Mission, but the Armour flats, and later the Armour Institute, the public being made aware of the latter gift on Christmas Eve, 1892.

Mr. Armour was married at Cincinnati in 1862 to Miss Belle Ogden, daughter of Jonathan Ogden. Two sons have been born to them, Jonathan Ogden Armour and Philip D. Armour, Jr., who died January, 1900.

Gustavus Franklin Swift was born June 24, 1839, at Sandwich, Cape Cod, Massachusetts, and died in Chicago, March 29, 1903, at the age of sixty-three.

Mr. Swift was one of eight sons in a family of twelve children. His parents were plain New England people, his father being a farmer, the boys working on the farm in their younger days. Feeling that his father's farm was not capable of supporting the entire family, Gustavus F. Swift determined to branch out into some other occupation and obtained employment with the town butcher at Sandwich. Having acquired a knowledge of butchering, he decided after a few years to go into the business for himself and started with a peddling wagon, selling from house to house. He afterwards moved to Barnstable, Massachusetts, where he continued his business and established a small slaughter house.

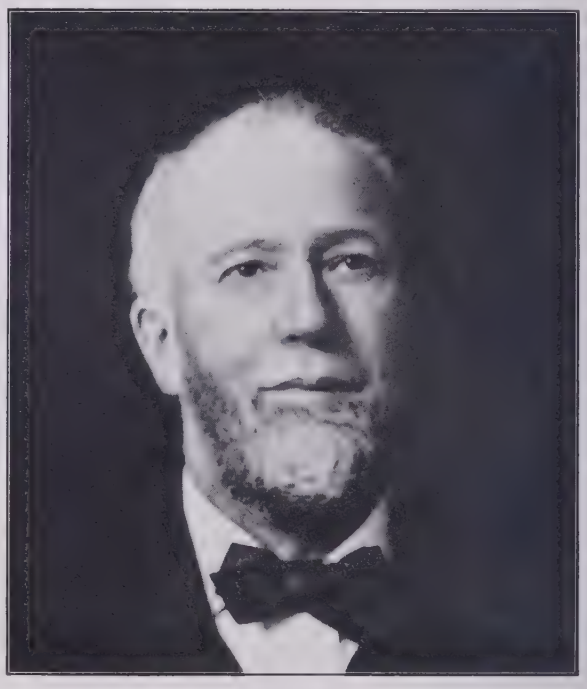
On January 3, 1861, Mr. Swift was married to Annie M. Higgins, and continued to reside at Barnstable until 1869, when he moved to Brighton, Massachusetts, a suburb of Boston, which was then the principal live stock market of New England.

Shortly after his arrival in Brighton, he entered the employ of J. A. Hathaway, subsequently becoming a partner under the firm name of Hathaway & Swift. They bought cattle in Albany and Buffalo and shipped the animals to Brighton, Mr. Swift visiting the cattle markets and making most of the purchases.

It was about this time that Chicago began to attract attention as a live stock center and Mr. Swift bought cattle in Chicago for eastern shipment to his firm. In 1875 he moved his family to Chicago and the partnership with Mr. Hathaway was dissolved, Mr. Swift going into business under the firm name of Swift Bros. & Co.

During the year 1877 Mr. Swift started to slaughter cattle in the Union Stock Yards, Chicago, and in the winter of that year he first shipped dressed beef from Chicago to eastern markets, using ordinary box cars for the railroad journey. The idea was at first considered impracticable, but as the result proved profitable, shipments were continued until the refrigerator car finally solved the problem of transporting fresh meat over long distances. From this time the business increased rapidly and the firm prospered.

In 1885 Swift & Company was incorporated with $300,000 capital and Mr. Swift elected president, the corporation taking over the business of Swift Bros.



GUSTAVUS FRANKLIN SWIFT.

& Co. In 1905 the company had a capital of $35,000,000 and had over 25,000 employees on its payroll.

Mr. Swift made it a rule to keep in close touch with all branches of his business and was familiar with every detail of it. He was a firm believer in quality and constantly aimed to produce the best in all the varied products manufactured by the modern packing house.

The exceptional growth of Swift & Company can be directly traced to the successful management and rare executive ability of the man who conducted its affairs from its inception until within a few days of his death in 1903. He was always enthusiastic about his business and had the faculty of instilling that enthusiasm into his associates and employees. He was a man typical of his time and was quick to see the advantage of any new idea which could be applied to the packing industry. The continual development of scientific methods for the handling of by-products, of economy

in operation and of mechanical refrigeration were all factors contributing to the success of the Swift business and he who was ever on the alert to further the interests of the company took the greatest personal pride in its expansion and progress.

It is perhaps worthy of remark that his success was won by strictly business methods. He was not a speculator, although there was no keener judge of market conditions and no one knew better than he the trend of trade affairs.

Among his employees he was as plain and matter-of-fact as when he was comparatively poor. Many of the men who had been employed under him for years, he knew intimately and he was familiar with the names of scores.

Outside of his business his whole life interest was centered in his home and his church. His home life was ideal and he left behind him a family consisting of his widow, two daughters and seven sons. His eldest son, Louis F. Swift, is now president of the company, and Edward F. Swift is vice-president, and all of the other sons, with the exception of the youngest, are connected with the company.

Mr. Swift's charities were numerous, but little was heard of his gifts, as he was much opposed to having such matters made public. Many educational institutions and scores of struggling churches all over the country were constant recipients from his thoughtful and kindly purse.

Coming to Chicago at a time when that city was on the threshold of its commercial glory, Gustavus Franklin Swift foresaw the many opportunities lying before him and the vast work he constructed and perfected is a fitting monument to his greatness.

Philip F. W. Peck came to Chicago in 1830, when the city was nothing but a frontier post, known as Fort Dearborn. He came by sailing vessel from Buffalo and brought with him from the East a stock of goods, proposing to locate here or continue south. The natural advantages of this point, however, and the future which he foresaw for it, induced him to decide upon remaining.

Born in Providence, Rhode Island, in 1809, Mr. Peck had been brought up in New England, which had been the home of several generations of his ancestors, the American progenitor of the family having immigrated to that region from England some time before the middle of the seventeenth century. His educational and industrial training had been of that practical kind which the men who became pioneers in building up western trade and commerce had generally received.

He grew to manhood with correct habits, a capacity for close application to business, and a comprehensive knowledge of the principles which govern the building up of centers of commercial activity. He was ambitious, enterprising and self-reliant, and, as his subsequent career demonstrated, had a genius for finance, and was possessed of unusual business foresight.

He came to Chicago with, or perhaps shortly before, Captain Joseph Napier, founder of the town of Naperville—at one time the county seat of DuPage County—and was for a short time associated with the latter in business. His first merchandising operations in Chicago were carried on in a small log building, which he erected near old Fort Dearborn, in 1831, and which he occupied until the fall of the same year.

At that time he had completed—or at least had got in fit condition for occupancy—a two-story frame

PHILIP F. W. PECK.

building, located at what is now the southeast corner of South Water and La Salle streets, into which he moved his stock of goods. But one frame building had been erected in Chicago prior to that time, and Mr. Peck's building was, in fact, the first of this character to be used as a "store building." The land upon which this building was located is still owned by members of his family.

It was in the unfinished second story of this building that the first Sunday-school organized in Chicago held some of its earliest meetings, and in which also the Rev. Jeremiah Porter, the first minister, to hold regular religious services in the town, established his study and found a lodging place. It was in this—for that time—superior structure, too, that Mr. Peck laid the foundation of a fortune, which has since been developed into a rich estate. Here he carried on the business of mer-

chandizing until such time as it became necessary for him to give his whole attention to his realty interests and the care of his growing fortune.

A resident of Chicago two years before it had a recognized corporate or municipal existence, Mr. Peck was a pioneer of the pioneers. He was one of the volunteers who went out from the straggling settlement around Fort Dearborn to aid in suppressing the famous Indian chief, Black Hawk, in 1832, and he helped to organize the settlement into a town in 1833. He was a member of the first fire company organized in Chicago and a voter at the first city election. The first brick dwelling erected in the city—at the corner of Washington and La Salle streets—was built by Mr. Peck as a residence in 1836, and the site is also still owned in the family. He was "in at the birth" of the town, witnessed the transition from town to village, from village to city, and from a provincial city to the great metropolis of the Northwest, and, two weeks before his death, which resulted from an accident and occurred on the 23d of October, 1871, he saw the city that had sprung up under his observation practically swept out of existence by the great fire of that year. Such are not the experiences of an ordinary lifetime.

The accumulator of a large fortune, Mr. Peck demonstrated that adherence to approved and conservative business methods builds up more substantial estates than those which result from speculative enterprises. A sagacious and far-seeing man, who had always great confidence in the continued growth and prosperity of Chicago, he was never carried away by the speculative excitements which swept over the city from time to time, to be followed by corresponding periods of business depression and financial distress. His own affairs were kept so well in hand that he passed safely through financial crises like those of 1837 and 1857, when many of his contemporaries met with reverses from which they never recovered.

These periods of general business depression did not weaken even temporarily his faith in the ultimate growth and prosperity of Chicago, but rather had the effect of stimulating him to make investments at the more advantageous terms offered under such circumstances. His conservatism was such that he met with no reverses of consequence during his business career, and his fortune grew steadily from the date of his coming to Chicago to that of his death.

In 1835 he was married to Miss Mary K. Wythe, a Philadelphia lady, of English parentage, a niece of the celebrated Baptist divine, Dr. Staughton of Philadelphia. She died in 1899. Their family consisted of eight children, all of whom were born in this city. Four of them died in infancy, and one of the sons, Harold S. Peck, died some years since. The other sons, Walter L., Clarence I. and Ferdinand W. Peck, are all leading citizens of Chicago, which they have greatly benefited by their enterprise and public spirit. The latter has become widely known through various public institutions with which he has been prominently connected and the public-spirited enterprises which he has projected. He was one of the founders of the Illinois Humane Society and also of the Chicago Athenæum, of which he is the president, and the vice-president and chairman of the Finance Committee and one of the directors of the World's Columbian Exposition of 1893. He conceived the idea of the renowned Auditorium building, containing a vast auditorium hall, a hotel and other features, organized the company for its erection, and, as its president, carried it through to completion and successful operation.

This great building is to-day the pride of Chicago, an object almost, if not quite, as conspicuous among the splendid structures by which it is surrounded as was the framed store building built by the elder Peck among the log shanties of Chicago seventy-four years ago. He was also commissioner-general of the Paris exposition of 1900, appointed by President McKinley.

David R. Fraser, deceased, was born at Berwick-on-the-Tweed, Scotland, on May 18, 1824. He came to this country in 1848, and obtained employment in a machine shop in Pittsburg. That same year he removed to Chicago, entering the employ of Gates & Hoag, later Gates & McKnight. One of his fellow employees was Thomas Chalmers, with whom he created the firm of Fraser & Chalmers twenty-three years later. In 1850 Mr. Fraser was struck by the gold craze that swept the country and crossed the plains to California, but fever and ague drove him back, he returning by way of Panama.

In 1852 he returned to California, where he secured a position in a machine shop, but the climate did not agree with him, and he returned to Chicago, becoming foreman in the locomotive works of Scoville & Sons, which stood on the site now occupied by the Union depot at Canal and Adams streets. He superintended the construction of the first locomotive ever built in Chicago, and personally ran it over the plank road on Canal street up to Kinzie street, delivering it to the old Galena & Chicago Railroad. In 1854, when the Scoville works shut down, Mr. Fraser became associated with P. W. Gates & Co., where he built engines by contract. He served as foreman until 1857, when he became a partner of the firm. Later on he aided in organizing the Eagle Works Manufacturing Company at the corner of Canal and Washington streets. Both he and Mr. Chalmers were stockholders and superintendents in this enterprise. After the fire in 1871 the business was abandoned and the firm of Fraser & Chalmers established.

It retained its name until 1890, when it was purchased by an English syndicate.

In 1890 Mr. Fraser went to England and erected the English works of Fraser & Chalmers, Ltd., at Erith on the Thames, a short distance from London. He remained there for three years, until the works were completed, except for an occasional trip to Chicago to

DAVID R. FRASER.

assume charge of the local factory when it was deluged with orders for mining machinery. His executive ability in shop management was remarkable; it alone enabled the firm to meet its orders. He retired from active business in 1893, though he was vice-president and largest stockholder of the Chicago Portland Cement Company, of which his son, Norman D. Fraser, is president. On May 29, Mr. Fraser was stricken with apoplexy, and after twenty-four hours of unconsciousness he succumbed, at the ripe age of eighty.

He was married in November, 1851, to Miss Lydia H. Scoville. Three children were born to them: Mrs. E. F. Minor, Mrs. W. F. Main and Norman D. Fraser. Their golden wedding was celebrated in November, 1901, on which occasion they were surrounded by their children and grandchildren. Mr. Fraser, as a mechanical engineer and inventor, occupied a front rank in America. He invented many devices and contributed very largely to the development of modern mining machinery. He was a man of winning personality, his generosity and kindness extending down to his dealings with his humblest employees.

Joseph Edward Otis, capitalist and real estate owner, was born in Berlin, Erie County, Ohio, April 30, 1830, the son of Joseph and Nancy (Billings) Otis. After receiving a common school education in his native town he took a three years' academic course in the Huron Institute, at Milan, Ohio. At the age of twenty-one he was appointed postmaster of Berlin, serving in that capacity until 1855, when he became cashier of the Milan Bank. Shortly afterwards he acquired a half interest in the institution by purchase, but the business was brought to a close in 1862. Through his connection with the bank he came into possession of several vessels on the Great Lakes, so he removed to Chicago, in 1860, to assume charge of them. The boats were used for shipping grain to Buffalo and Oswego, New York, and bringing back coal, from Erie and Cleveland. In those days shipping rates were high and the business was profitable, the coal cargoes yielding large profits in Chicago. The firm was dissolved in 1865, owing to the death of one of the partners.

About this time Mr. Otis began to recognize the possibilities of future growth for Chicago, in a commercial and business way, and selected this city as a field for investment. In 1868, in connection with Matthew Laflin, John V. Farwell, P. Willard, James Woodworth

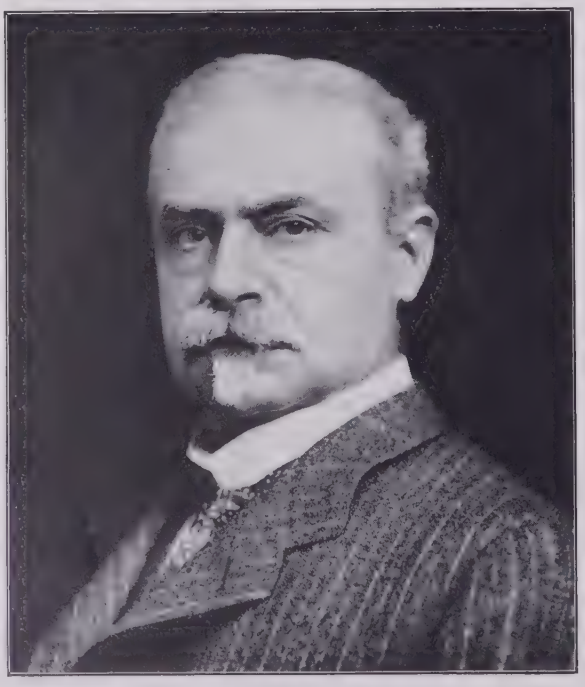
JOSEPH EDWARD OTIS.

and others, he organized the Chicago Fire Insurance Company, which was chartered under the state laws with a capital of $100,000. He was chosen president of the board of directors, serving in this capacity for three years. In 1870 he was elected alderman from the Second ward, on the Republican ticket. During his term of office he was on the finance committee and the committee on streets and alleys for the South Side. He

retired from active business a number of years ago, spending much of his time abroad, though he still devoted some time to his large real estate interests, located largely in the down-town district. Mr. Otis visited nearly every civilized land on the globe, achieving quite a reputation as a traveler. In 1888 he visited Egypt, spending an entire year there to study the antiquities of that country. He made a trip around the world in 1894. He was especially interested in Cuba, where he made an extensive study of that island's conditions and industries. He was making a trip through the West Indies in the spring of 1898, at the time the Maine was destroyed in the harbor of Havana. In the winter of 1901-1902 he contracted a fatal illness which extended over a period of several months, his death occurring on March 9, 1902.

Mr. Otis was married to Miss Ellen Marie Taylor, daughter of Judge S. F. and Judith (Kellogg) Taylor, of Milan, Ohio. Four children survive them, Joseph E. Otis, Jr., Ralph C. Otis, Mrs. J. E. Jenkins and Mrs. H. W. Buckingham.

Thomas H. Wickes, late vice-president of The Pullman Company, devoted the best part of a lifetime to the organization and development of that great corporation.



THOMAS H. WICKES.

He was born in Leicestershire, England, August 28, 1846, and died suddenly in Chicago, March 28, 1905.

On April 1, 1868, he entered the railway service in the position of an assistant to the agent of the Pullman Palace Car Company. From April, 1868 to 1870 he held this place in the East St. Louis offices of the company. In the latter year he was advanced to an assistant superintendent, and in May, 1873, he became superintendent of the St. Louis division. He filled this position, making his headquarters in St. Louis, for the next twelve years.

In May, 1885, his headquarters were transferred to Chicago, and he was made western general superintendent. He was promoted to the responsible position of general superintendent of the company in September of the following year. On New Year's day, 1889, he was elected second vice-president of the company and took control of the operating department. He was elected first vice-president, October 15, 1896, and continued in this office when the corporation was reorganized as The Pullman Company. Mr. Wickes held this position at the time of his death.

He was interested financially in numerous other ventures and took an active part in affairs of the day, but The Pullman Company was the only corporation to whose interests he devoted his entire time.

Thomas Gahan was in many ways one of the most prominent figures in the political, business and social activities of Chicago during the past decade. For over twenty-five years he was the leader of the Cook County Democracy and for eight years represented his state on the national committee of his party. As president of the Ogden Gas Company he held a high place in the business world.

Mr. Gahan was born in what is now known as Arlington Heights, Cook County, April 7, 1847. His first public position was that of captain of police in the old town of Lake, in which position he won distinction by establishing and maintaining law and order. This was especially true during the great strike of 1884.

Through his police connection he drifted into politics, organizing the Democracy of the town of Lake. He brought about the nomination of the late Julius S. Grinnell for state's attorney, who was the only democrat on the ticket to be elected. When the town of Lake was annexed to the City of Chicago he was elected alderman to represent the new ward, the Twenty-ninth, having served several terms as supervisor before annexation. Mr. Gahan served in the city council from 1889 to 1893, when he resigned to become railroad and warehouse commissioner under Governor Altgeld, whose nomination and election he had been instrumental in securing. In 1896 he was elected a member of the Democratic National Committee for Illinois and re-elected in 1900. Ill health prevented his acceptance of the honor in 1904. He also served as chairman of the Democratic Central Committee, Cook County, from 1895 to 1902. He was elected delegate to each Democratic national convention from 1884 to 1904, inclusive.

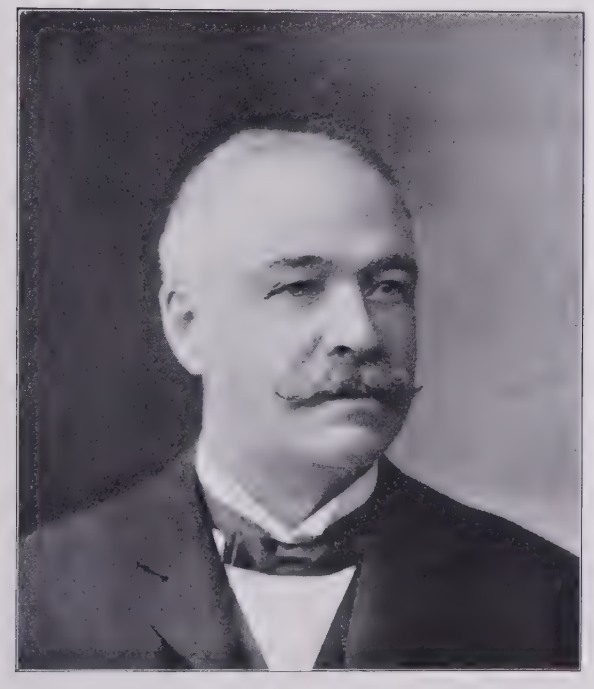
In politics Mr. Gahan was a power. He secured the nomination and election of such men as Governor

Altgeld, Mayor Hopkins, of whom he was a close friend and adviser, and many others. He exerted a large influence in state and national politics, taking an active part in every campaign from the Cleveland-Blaine struggle in 1884 to the McKinley-Bryan campaign in 1900.

His business career was marked by the same success as attended his political endeavors. He was associated with Thomas Byrne for many years in general contracting business, during which time they built three sections of the drainage canal, the Robey Street sewer and all the underground work at the Columbian Exposition.

Saturday evening, April 29, 1905, Mr. Gahan contracted an acute attack of Bright's disease, with which he had been ailing for two years. His condition rapidly became worse and the following evening he succumbed at his residence, 4619 Grand boulevard.

Mr. Gahan was a member of the Sheridan, Cook County, Ellerslee Cross Country, and Iroquois clubs, and of the Knights of Columbus. He was a liberal and silent giver to charity and always evinced a deep

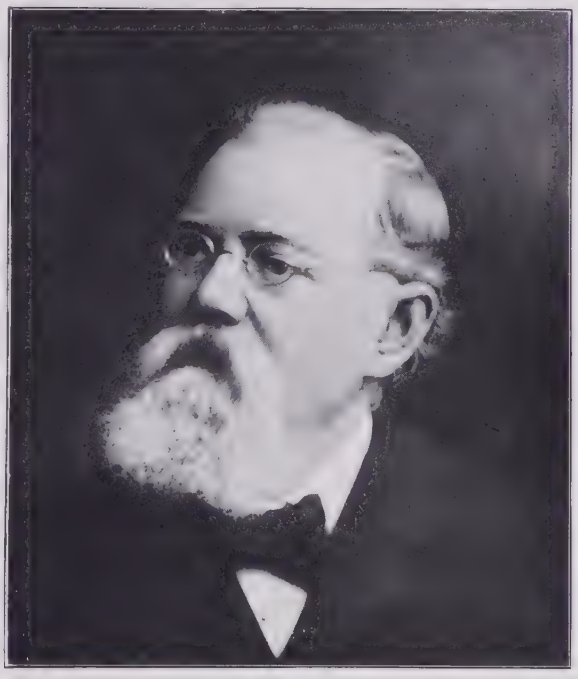


THOMAS GAHAN.

interest in the schools of Chicago. He was married November 8, 1877 to Miss Sarah A. McNarney, who survives him, together with his daughters, Sarah, Olive, Agnes and Rose.

Charles Emmerich, the founder of the largest feather-pillow manufactory in the United States, was born August 31, 1840, and died September 14, 1903. He came to this country at the age of sixteen.

Shortly after arriving he connected himself with Wiglieb & Co., who were then in the feather and leather business. Following the feather branch, he was soon placed in charge of a branch store. This proved very successful; in fact, this business in a short time surpassed that of the home office. Mr. Wiglieb, about this time decided to retire from business, and sold the feather



CHARLES EMMERICH.

branch to Mr. Emmerich, from which sprang the present company of Chas. Emmerich & Co.

The success of the house is due to the untiring efforts and honorable dealings of its founder. That he had much to contend with its evidenced by the fact that in the great Chicago fire, not only was his business place entirely destroyed, but he also lost his home, and all its contents. He had nothing but what was due him from his customers, and it was a long time, on account of poor postal facilities, before he received anything from this source. With renewed energy he again opened up a temporary office, and soon had the business on a paying basis again. In 1905 the plant of Chas. Emmerich & Co. was again totally destroyed by fire, but, as in the former case, it arose from this calamity and to-day holds an enviable position among the business houses of Chicago.

William H. Bush. In a great commercial center, in the most attractive period of the world's existence, it is pleasing to note the philanthropy of a practical business man, successful and unselfish. The death of William H. Bush removed not only a prominent factor in the piano industry of America, but a man

whose sterling name and substantial achievements are interwoven with the wonderful growth of Chicago and the development of the West.

Mr. Bush came here from Baltimore more than half a century ago, beginning business at a time when strenuous and honorable individual effort assisted so much in the advancement of Chicago as the metropolis of the West. His energies were ever in the direction of the higher citizenship and a sterling standard for integrity in the career of the man, the merchant and the manufacturer.

When Chicago was almost obliterated by the great fire Mr. Bush was engaged in the lumber business, and all of his worldly possessions, the day after the great conflagration, consisted of two small charred schooners laden with lumber, that had been towed from the river to the outer harbor. His first thought was for Grace M. E. Church, where he had been a deacon for a quarter of a century. From his meager stock he generously aided in the rebuilding of a church on the site of its predecessor that was completed within a week after its destruction. Then came anew the struggle for existence, and Mr. Bush was unusually successful.

With a well-grounded belief in the North Side, Mr. Bush in 1875, securing the services of Edwin Burling, architect, erected a large two-story brick building on the northwest corner of North Clark street and Chicago avenue, with the idea of establishing a market fashioned after the old Lexington market in Baltimore. Mr. Bush devoted the basement, and the three-story addition in the rear, facing on Chicago avenue, to his packing interests.

BUSH TEMPLE.

As a market-house with the stall plan was not so successful as had been anticipated, the free delivery system in vogue in this city militating against the old-fashioned style of marketing, the building was remodeled into stores. In 1882, after seven years in the packing business, Mr. Bush sold out his interests in that line and retired, merely devoting his attention to real estate holdings. But Mr. Bush preferred the activity of a business life, and late in 1885 formed a partnership with Mr. John Gerts, a practical piano man, for the purpose of manufacturing pianos. The business thus promulgated flourished with unprecedented success, and Mr. Bush was still at the helm guiding and directing its large interests when stricken with the illness which robbed Chicago of one of its most successful financiers and a citizen of whom it might well be proud.

The late William H. Bush, while taking a justifiable pride in his business, had loftier ambitions in bettering the general conditions of the community. He was active in the work of the Church for over forty years, a thorough believer in practical Christianity, a member of the Civic Federation, the Society for the Prevention of Vice and other beneficial municipal organizations. He was ever a strong advocate for temperance, and the encroachment of the saloons in the Clark street neighborhood was to him a sore trial. Personally he would tolerate no affiliation with liquor interests in any property that he owned or controlled.

In addition to his many charities, one in which he was particularly interested was the Methodist Old People's Home, on Foster avenue, in Edgewater. It was his first donation of $35,000, that made the building of Bush Hall possible, and his gift of the lots adjoining will enable the directors to add the projected wings of the completed building. The present Bush Hall is a substantial four-story building, accomodating sixty inmates. The completed building plan includes three continuous buildings, of which the one erected is the middle building, and a chapel on the corner adjoining. The Home completed will take care of two hundred and fifty people.

An inspection of the Home demonstrates that it has the inviting atmosphere of a home, with cozy rooms well lighted and heated and comfortably furnished. The furnishings are substantial and have been selected with taste. Many indi-

viduals, Epworth Leagues and other Societies, have furnished rooms. An institution of this nature must have an endowment fund, and one of the last bequests of Mr. Bush was the sum of $30,000 for this purpose. The Home was dedicated three weeks after Mr. Bush's death. Interested friends have already promised the

WILLIAM H. BUSH.

necessary money to erect the second building of the series projected.

Mr. Bush had a sincere fondness for the old corner where he had been in business so long, and an abiding faith in that particular section of the North Division. During the last ten years of his life he had several times planned to remodel the building, but two years before his death ordered plans for an entirely new building upon the site. It was his desire that it should be freed as far as possible from the environments of commercialism, a monumental structure that should be beautiful as well as useful. A few weeks before the time appointed for the breaking of ground preparatory to the erection of the building Mr. Bush was seized with a fatal illness. His last request of his two sons was that they should carry out his projects in regard to the building. As a result of this request and its faithful execution, the Bush Temple of Music, a beautiful and imposing structure now stands as a memorial to one of the most honored citizens, successful business men, and broad minded philanthropists of the great western metropolis.

Charles Netcher when fourteen years old started work as a cash boy and bundle wrapper, and at the time of his death, thirty-eight years later, was sole proprietor of one of the largest mercantile houses in the world. By unceasing work and keen business ability he built up as a monument to his name, the great retail store where he passed all the working hours of his life. The history of his life reads like a young man's sermon on how to succeed.

Born in Buffalo in 1852 Mr. Netcher when fourteen years of age entered the dry goods business of Edward and C. W. Pardridge as cash boy and bundle wrapper. When the Pardridge brothers came to Chicago in 1869 young Netcher came with them. It is said that after he became manager of the store at State and Madison streets, receiving $4,000 a year, he worked eighteen hours a day and slept on the counter in the store in order to be at work early the next morning.

After the Chicago fire in which the firm lost everything with the exception of a few cases of goods, which were on the road in transit, Mr. Netcher suggested they construct a shanty on Twenty-second and State streets, which was done, with any available lumber they could find. They made a success of this undertaking and this was the beginning of Mr. Netcher's upward career.

When the Pardridges turned their attention to wheat deals, Mr. Netcher gradually acquired an interest in the dry goods house over which he was their mana-

CHARLES NETCHER.

ger. Five years later they relinquished all their holdings in the business and he became the sole proprietor of the Boston Store.

Although Mr. Netcher never considered his health in his close application to business, the brief fatal illness preceding his sudden death came as a surprise to even his closest friends. He had been operated upon

for appendicitis and the family was confident of a speedy recovery when he was stricken with apoplexy. Death occurred on June 20, 1904.

A short time before his death, Mr. Netcher purchased the Champlain block, one of the large office buildings of the city. The lower floors of the block were utilized for the expanding business of the Boston Store and it was his intention to ultimately rebuild the old store building to the height of the new structure, making one of the finest building blocks in the city, to be known as the Charles Netcher block.

Mr. Netcher cared little for those outside activities of political and public affairs which attract so many business men. He adhered closely to business and all his spare time was devoted to his family. He developed the Boston Store from an obscure position to one of the leading retail establishments of the city and increased his real estate holdings until they were among the largest in Chicago.

Only a few months before his death, Mr. Netcher took out a life insurance policy for $500,000, of which his widow was the beneficiary. She has assumed with rare executive ability the active management of his vast business interests. Immediately after Mr. Netcher's death, the employees of the Boston Store met and passed resolutions, pledging themselves to carry on the business on the lines taught by their late employer.

Mr. Netcher's home life was ideal. While his idea was to save, yet for his wife and family there was nothing too good. In his entire married life of thirteen years, Mr. Netcher spent all his time, which was not given to his business, with his family, where he found contentment and rest after strenuous day's work. His life was above reproach, and his habits were of the best.

Jacob Forsyth, who died January 29, 1899, was one of Chicago's pioneer land owners and real estate dealers. He was born in the north of Ireland, January 12, 1821, and came to this country when he was fifteen years old, settling in Pittsburg, Pennsylvania. He was employed in a commision house in that city for twenty years before coming to Chicago.

In 1857 he entered the employ of Clarke & Co., the western through transportation agents of the Pennsylvania Railroad. A few years later he became the northwestern agent for what was then the New York & Erie Railroad. Previous to this he married a sister of George W. Clarke, at that time an extensive owner of Chicago property. General H. F. Clarke, who gave distinguished service in the Mexican war, and later as a member of General McClellan's staff, and Colonel R. D. Clarke, were other brothers-in-law of Mr. Forsyth. Mr. Forsyth's widow survived him little more than three months.

He laid the foundation for his fortune in realty when he purchased 10,000 acres of land in Lake County, Indiana, in 1866. By this one transaction, he became the largest single land owner in the Calumet region near Chicago. In the same year, George W. Clarke died leaving much of his property to his sister and considerably increasing the acres under Mr. Forsyth's control.

For years Mr. Forsyth was involved in litigation with squatters on his immense tracts. He was finally successful, and they were expelled. Another bitter contest to establish his title was with the city of Hammond, Indiana. Former President Harrison represented him in this litigation and carried it to a termination favorable to his client. During these long years of litigation, Mr. Forsyth was an eager student and reader of authorities and literature on riparian rights, and was one of the best posted men in the country on this phase of land litigation. The East Chicago Improvement Company purchased 8,000 acres from him, and at the same time he donated 1,000 additional acres as a site for the town of East Chicago. In 1888, a further inroad into the immense holding was made when he transferred to the Standard Oil Company the land which is now covered by the corporation's plant at Whiting, Indiana.

Mr. Forsyth was a man of pronounced opinions and great physical vigor. His purchases of realty were made at a time when the barren sand dunes of the Indiana shores were considered valueless, except as a cause for paying taxes. It was not until several years later that his opinion of their ultimate value was realized.

He was survived by four daughters and five sons, of whom Oliver O. Forsyth, now administers the affairs of the estate.

John V. Farwell, Sr., a pioneer and a chief among the wholesale dry goods merchants of Chicago, was born in Steuben County, New York, July 29, 1825, the son of Henry and Nancy (Jackson) Farwell. While he was in his thirteenth year his parents came to Illinois and settled on a farm on Rock river, in Ogle County. Like many others of our great merchants and eminent professional men, Mr. John V. Farwell was inured to labor in his youth. Indeed, until the latter half of this century had begun, comparatively little trade was done without reference to the value of farm products. The country merchant took grain from his customers in exchange for other goods, and frequently offered it as payment in whole, or in part, to the jobber from whom he purchased his stock. Mr. Farwell relates that in his youth he sold wheat at forty-five cents a bushel, after hauling it a hundred miles, to Mr. Wadsworth, head of a dry goods house, and after selling it he helped to store it in an elevator which was worked by a rope. Wadsworth & Company, which became the commercial parent of the far greater firm of J. V. Farwell & Com-

pany, dealt, until 1851, in dry groceries, as well as in textile fabrics. In the panic of 1857-58, when stumptail money was the only currency in the Northwest, this firm paid its debts by buying and shipping wheat to New York.

After a preliminary education in the common schools of New York and Illinois, Mr. Farwell became a student in the seminary at Mount Morris, Illinois. He came to Chicago in 1845, and after several years of service as clerk in various dry goods stores he became a partner in the firm of Wadsworth & Phelps, in 1851. The firm of Wadsworth & Company was established in 1835, and thus its great offshoot, the incorporated firm of J. V. Farwell & Company, lays claim to the title of the oldest wholesale dry goods house in Chicago. From the time of Mr. Farwell's entrance as a partner the business of the firm was confined solely to the sale of dry goods and their legitimate adjuncts. In 1870 the headquarters of the firm were at 72, 74 and 76 Wabash avenue, and in this year the stock was all but completely destroyed by fire. Scarcely had this disaster been overcome before the great fire of 1871 involved the firm in new difficulties. Undismayed by these calamities, the firm, now John V. Farwell & Company did business in a wood building on Michigan avenue, and within six weeks from the destruction of their premises on Wabash avenue, they converted their stable and warehouse into a five-story brick store on Monroe street, near the river. Ten years later the new Farwell block, that occupies all the space on Market street between Adams and Monroe and abutting on the river with a 400-foot frontage on Market street, was built and occupied. Here, as he sits in his private office, that is occasionally darkened by the towering hull of some great iron-built steamer, Mr. Farwell calls to mind that he saw and assisted in the joyful celebration of the event of the first canal boat to enter the Chicago river. The circumstance was regarded as prognostic of great enlargement of the trade between the city and country, and for many years after this arrival of the first boat, the advent of a barge was regarded as important. The firm of John V. Farwell & Company became an incorporated concern in 1891. It has grown with the city's growth, and has strengthened with its strength, and stands in the front rank of the commercial institutions of a metropolis of 2,000,000 inhabitants, just as it stood in the first rank when Chicago was but a flourishing and ambitious city of the third class. In addition to his labors as manager of the great firm with which his name is associated, Mr. Farwell was active in the establishment of the Union National bank, and served as one of the directors until several years after the great fire.

In politics Mr. Farwell is Republican. He was a member of the electoral college that cast its vote for Lincoln in 1860, and for six years held the honorable and arduous, though unprofitable, office of Indian Commissioner during the first and second administrations of President Grant. Though frequently solicited to accept a nomination for various political offices, Mr. Farwell has declined to become a candidate for any elective office, or to hold any lucrative federal appointment. His political work has been of the unpaid and patriotic order. During the progress of the war for the Union Mr. Farwell served as chairman of the Northwestern Christian Commissions, and in that capacity devoted most of his time to advancing the temporal and spiritual welfare of the soldier in the field. There is no nonsectarian, religious or philanthropic movement to which Mr. Farwell has not given liberal and unostentatious aid.

J. V. FARWELL, SR.

Old "Farwell Hall," now the finest Y. M. C. A. building on earth, is, perhaps, the most widely-known manifestation of zeal and munificence toward the propagation of Christian doctrine.

Mr. Farwell has been twice married: first, to Miss Abigail Taylor of Illinois, and, second, to Miss Emeret Cooley of Hartford, Connecticut. There are five surviving children.

Frederick Augustus Smith, appellate justice of the Branch Court, First District of Illinois, is the son of Israel G. and Susan (Penoyer) Smith, and was born at Norwood Park, Cook County, Illinois, February 11, 1844. His early education was acquired in the common schools of Chicago, and in 1860 he entered the old University of Chicago. He was making excellent progress in that institution, when in 1863, fired by patriotic ardor, he threw aside his books and enlisted as a private in

Company G, 134th Illinois Volunteers. He remained in the service with his regiment, participating in the campaign of Missouri and Kentucky, in which his regiment was engaged, until mustered out in 1864. Returning to civil life, he took up the interrupted course in the University, and was graduated with honors in 1866. Following out a long cherished plan he began the study of law at the Union College of Law, receiving his diploma from that institution in 1867. He immediately began practice, forming a partnership with present United States District Judge C. C. Kohlsaat, which continued until 1872. The firm of Smith, Helmer & Moulton was formed in 1890. Afterward Mr. Price's

FREDERICK AUGUSTUS SMITH.

name was added, and the firm name became Smith, Helmer, Moulton & Price.

Mr. Smith had always been an unswerving Republican, and in 1898, became the party's candidate for judge of the Circuit Court. He failed of election that year, but again in 1903 was honored by receiving the nomination for the next term, and was elected, being one of the three Republicans chosen that year out of the fourteen candidates of his party for the Circuit Bench. Since his elevation to the bench, Judge Smith has occupied his position with all honor and dignity, fulfilling in the highest degree the confidence and expectations of his friends. Still greater honors were to come to him, however. In December, 1903, he was chosen by the members of the Supreme Court to be one of the justices of the Branch Appellate Court, First District of Illinois.

Judge Smith has been successful since his admission to the bar. The honors that have come to him have been fairly and honestly earned, won by meritorious and constant application to the trusts confided to him. As a practicing lawyer, his clients' interests were carefully and faithfully guarded, and his conscientious efforts in protecting the many intricate and important litigations confided to his care brought to him a large practice, and the good will and esteem of all who came in touch with him. His bearing on the bench has been marked with the confidence and dignity which come from deep knowledge, and thorough understanding of the law in all its phases and complicated details.

Judge Smith has always been a man of great public spirit, and has been actively connected with many benevolent and educational measures. Among the many social and professional organizations in which he is prominent may be mentioned the Union League Club; the Hamilton Club, of which he has been president; the Chicago Bar Association, to which he was also chosen president in 1890, and the Chicago Law Club, one of the most select and successful organizations of lawyers in Chicago, and in which he has also filled the executive office, being elected to that position in 1897. He is a member of the board of trustees of Rush Medical College, and has also been a member of the board of trustees of the University of Chicago since its foundation, and has participated actively in the organization and growth of that great educational institution.

Judge Smith was married July 26, 1871, to Miss Frances B. Morey, daughter of the Rev. Ruben and Mrs. Abby (Clemons) Morey, of Merton, Wisconsin.

Willard Milton McEwen, judge of the Superior Court, was born on a farm in Milan Township, De Kalb County, Illinois, December 15, 1863. When he was five years old his parents moved to De Kalb and he received his grammar and high school education in that town, graduating from the De Kalb high school in 1882.

Judge McEwen came to Chicago in 1885 and took a course at the Union College of Law. After his graduation in 1887 he entered the law office of Edward W. Russell, who was then counsel for several large corporations. He remained with Mr. Russell three years before he began practicing for himself.

In October, 1890, he formed a partnership with Charles S. Deneen, present governor of Illinois, under the firm name of Deneen & McEwen. The partnership was dissolved a year later and Judge McEwen formed a partnership with Frank B. Pease under the firm name of Pease & McEwen.

When Charles S. Deneen was elected attorney for the Drainage Board in 1895, Judge McEwen left his partnership to become Mr. Deneen's assistant. He took Mr. Deneen's place when the latter was nominated for state's attorney.

In February, 1896, Judge McEwen became first

assistant state's attorney, retaining the position until January, 1900, when he resigned to practice law for himself again. His most notable work as assistant state's attorney was the breaking up of the so-called jury bribing "ring." His ten months' investigation resulted in the flight of Daniel Coughlin and James J. Lynch and the subsequent indictment of Alexander

WILLARD MILTON McEWEN.

Sullivan when Lynch returned and turned state's evidence. The alleged fixing of juries involved several street railway cases.

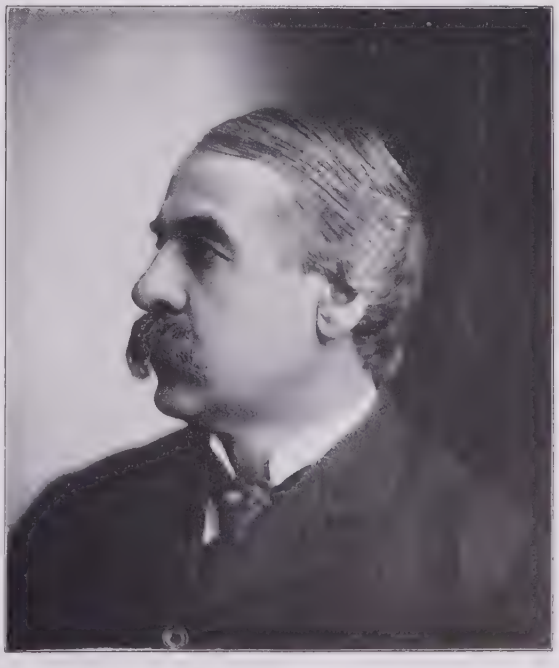
As assistant state's attorney, Judge McEwen also attracted widespread attention through his prosecution of the Adolph Luetgert and Emil Rollinger murder cases and the embezzlement charges against Charles W. Spalding. Luetgert was sent to the penitentiary for life for the murder of his wife and Rollinger was hanged for a similar offense. Spalding was convicted of embezzling $419,000 of the State University's funds.

In 1902 he was elected judge of the Superior Court.

Abner Smith, for two terms a judge of the circuit court of Cook County and now of the firm of Smith & Caswell, attorneys and counselors at law, with offices at 630 Chicago Opera House building, is of thorough American lineage. His ancestors, alike on the mother's and father's side, were among the earliest settlers of Massachusetts. He was born at Orange, Massachusetts, August 4, 1843. His mother, prior to her marriage, was Miss Sophronia A. Ward. The head of the Ward family settled in Massachusetts as early as 1639, and many of its members have been distinguished in judicial, military, legislative and clerical circles.

While Abner Smith was but a child his parents moved to Middlebury, Vermont, attracted by the superior advantages that town offered for the education of their family. After due preparation in the public and other schools, Abner Smith was enrolled as a student of Middlebury college, and was graduated in 1866. The Undergraduate, the journal of Middlebury college, in a review of the professional career of Judge Smith, characterizes him as "one who never aimed at ephemeral brilliancy or at the attainment of signal momentary results, but careful to avoid errors of judgment, and wisely distrustful of mere temporary achievements." These attributes have distinguished the judge through life and have been the dominant factors of his successful career.

After leaving college Mr. Smith was in charge of Newton Academy at Shoreham, Vermont, for about a year, when he decided to go west. Arriving at Chicago, he became a student in the law office of J. L. Stark. Mr. Stark himself was from the Green Mountain State and was a descendant of that Colonel Stark who, in the Revolutionary War, had come to the aid of Judge Smith's maternal ancestor, Major-General Ward. There was a warm feeling of friendship between preceptor and pupil, and in due time Abner Smith was admitted to the



ABNER SMITH.

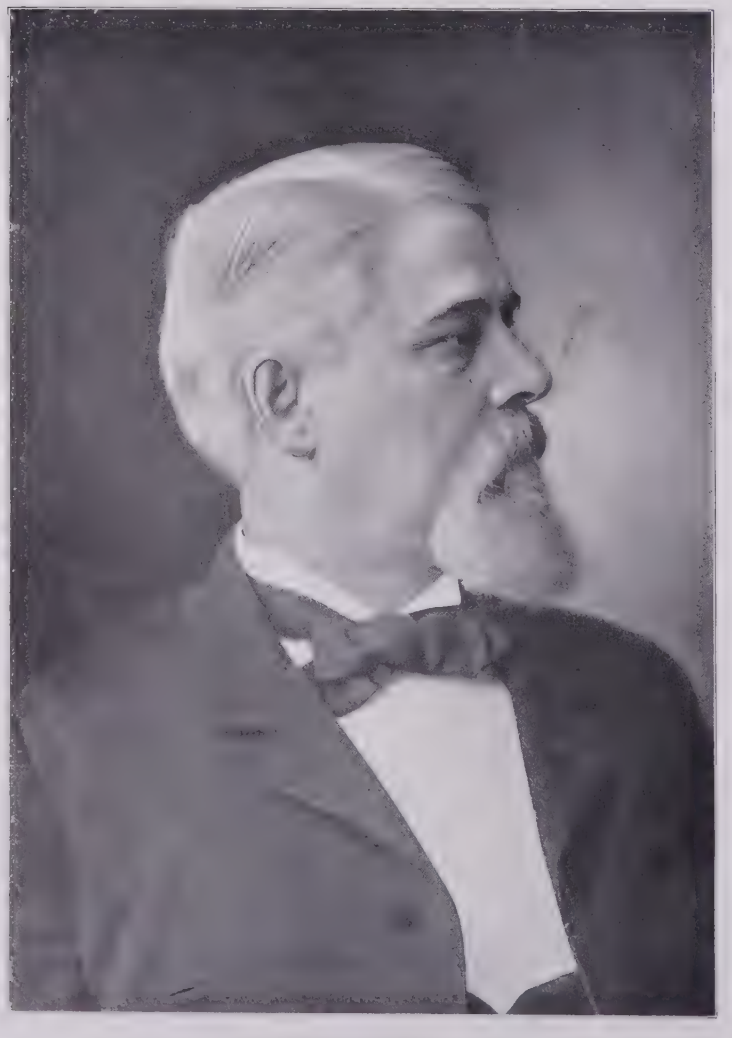
practice of law and became a partner with Mr. Stark. The firm of Stark & Smith was dissolved by the death of its senior member. Judge Smith continued the business of the firm and enlarged it. Subsequently Mr. Smith formed a partnership with Mr. John M. H. Burgett, and the firm of Smith & Burgett was well known to lawyers and clients for a period of ten years.

After forming other partnerships of brief duration,

Mr. Smith for a period beginning in 1887 practiced as an individual, and won his most notable legal victories by his own generalship. While eminent as a general practitioner, Mr. Smith attained the highest measure of success as a commercial and corporation lawyer, and has been retained as standing counsel by some of the most famous corporations of this and other states. In 1893 he was elected to the bench of the circuit court, a position that he filled with honor to himself and to his constituents for two successive terms.

Judge Smith was married in 1869 to Miss Ada C. Smith, daughter of the late Sereno Smith of Shoreham, Vermont. He is of eminently domestic and artistic tastes, and his home, No. 15 Aldine square, reflects his artistic and musical disposition.

Simeon P. Shope, former justice of the Supreme Court of Illinois and one of the leading members of the



SIMEON P. SHOPE.

Illinois bar, is a native of Akron, Ohio, where he was born December 3, 1837. Two years later his parents moved to Marseilles, Illinois. He obtained an academic education and later taught school, in the meantime pursuing his studies. After teaching for several years he entered the law office of Judge Elihu N. Powell and subsequently that of Judge Norman H. Purple of Peoria, Illinois. After being admitted to the bar in 1858, he practiced his profession in the various courts of Illinois until 1877, when he was elected to the circuit bench.

He served two terms in the old tenth circuit, with Judge Chauncey L. Higbie as one of his associates. He was elected in June, 1885, to the Supreme bench of the state, for a period of nine years. At the expiration of his term he was urged for the renomination, but he declined the honor. Removing to Chicago in 1894, he resumed his law practice. He is well known as a prominent member of the Chicago bar. He is now senior member of the firm of Shope, Mathias, Zane & Weber.

Judge Shope has interested himself largely in public affairs. Prior to his judicial election he had been a conservative Democrat, taking an active part in his party's activities. He is a Mason, Knight Templar, Elk and Knight of Pythias. He was married in 1858, his wife dying in Florida, on January 4, 1883. There were four children born to them, of whom the two younger are still living.

Ephraim Banning comes of good legal stock, his mother, who was a Kentuckian, being a sister of the late Judge Pinkney H. Walker of the Supreme Court of Illinois, and having among her people others who attained distinction in the science of law. Her father, Gilmer Walker, had a large practice, and his brother, Cyrus Walker, was a distinguished practitioner in Kentucky until he removed to Illinois, where he achieved still more noteworthy success—Lincoln, Douglass, S. T. Logan and Cyrus Walker ranking at one time as the four leading lawyers of the state.

Mr. Banning's name may be placed on the long roll of successful men whose characters have been formed largely by maternal influence, but the character of his father, after whom he was named, was far above the average. A Virginian by birth, and of the class to which in that early day few opportunities of education were offered, he became a person highly esteemed among the early settlers of Illinois and Kansas. He turned his back upon slavery, and at a very early day settled in McDonough County, Illinois, where Ephraim Banning was born, July 21, 1849. Subsequently the family moved to Kansas, and in that territory the early boyhood of Ephraim was spent, and by the incidents of his life among the early, sturdy, freedom-living settlers of "John Brown's Commonwealth," his earnest devotion to the cause of civil and religious liberty doubtless was largely determined. From Kansas the Banning family moved to Missouri, and while there the Civil war broke out. Two of Mr. Banning's

brothers promptly enlisted for service in the cause of the Union, Ephraim—then about twelve years of age—becoming his father's "right-hand man" on the farm. One of the brothers gave his life to the national cause, the other served with honor till the close of the war. The educational advantages of a frontier settlement in Missouri during the war times were not of the best, but young Banning made the most of them, and in his seventeenth year had learned all the schools of the neighborhood could teach, and afterward attended the Brookfield, Missouri, Academy, where, under the tutorship of the Rev. J. P. Finley, D. D., he studied the classics and other courses of a liberal education. Subsequently he became a student at law in the office of Hon. Samuel P. Huston of Brookfield.

In 1871 Mr. Banning came to Chicago and acted as student and clerk in the law office of Messrs. Rosenthal & Pence, and was admitted to the bar of Illinois by the Supreme Court in June of the following year. In October he opened an office for himself, and without the advantage of influential friends or political patronage soon succeeded in gaining a fair clientage as a successful practitioner. Speaking of his early experience, the late Judge Henry W. Blodgett has said that "he had a large and varied practice" in his court, and that "he showed himself a good admiralty lawyer, was well equipped on all questions arising under the bankrupt law and in commercial cases generally, as well as in real estate law."

Mr. Banning's mind was directed by circumstances attendant on his practice and by natural tendency to a special study of the law of patents, and after about ten years he practically withdrew from general practice and made a specialty of patent cases. There is no doubt that Mr. Banning would have achieved marked success as a general practitioner, for he has an intellect that is both quick and cautious, and is a very convincing speaker; but he did well in following the bent of his nature. In 1877 he was joined in practice by his brother, Thomas A. Banning, and in 1888 by George S. Payson, who was succeeded in 1894 by Thomas F. Sheridan, who retired from the firm in 1900. Samuel W. Banning, son of Thomas A., was admitted to the firm in 1903, and Walker Banning, son of Ephraim, in 1905. For twenty-five years or more the firm has been not only eminent, but prominent, in the management of litigations relative to patents and other intellectual property. Their briefs are familiar in the Supreme Court of the United States and in the Federal courts at Chicago, Detroit, Cleveland, Pittsburg, St. Louis, St. Paul, Cincinnati, Kansas City, Boston, Philadelphia, New York, New Orleans and other places.

Though an ardent Republican, Mr. Banning remained "a private in the ranks" until elected a McKinley presidential elector in 1896. In 1897 he was appointed by Governor Tanner to the unpaid, but honorable and responsible, office of member of the State Board of Charities, the duties of which he was peculiarly well fitted to perform. Early in 1899 he was strongly urged for the office of United States District judge at Chicago, for which he was supported by Senators Cullom and Mason and a majority of the Chicago congressmen—five out of seven—and, as stated by one of his opponents, endorsed by "the Republican organizations of the state, county and city, together with the bar association and the leading citizens of Chicago." The President, however, had other plans, and, in pursuance of these, made a personal appointment.

EPHRAIM BANNING.

Mr. Banning is a member of the Union League Club and of the American, State and Chicago Bar associations, in the latter of which he has at times been an active factor. For several years he was a member of the committee of the Chicago Bar Association on legislation with reference to Federal judges and practice in the Federal courts. He was also a member of its committee on legislation to establish the juvenile court in Chicago and revise the laws relating to the care of delinquent and dependent children in Illinois. He served as chairman of the committee on Organization of the Congress on Patents and Trademarks, held under the auspices of the World's Congress Auxiliary of the World's Columbian Exposition, in 1893, and which was presided over by Judge Blodgett, formerly of the United States Court at this city. He was chosen by this congress as one of five to present certain industrial

questions, specially relative to patents and trademarks, to the Congress of the United States.

In religion Mr. Banning is a Presbyterian, and is an elder in that church. He has been twice married—first, to Miss Lucretia T. Lindsley, who died in 1887, leaving three sons, all of whom survive; and, second, to Miss Emilie B. Jenne. He resides on Washington boulevard, near Robey street, and has been a resident of that vicinity for over thirty years.

John Stocker Miller, son of John and Jane (McLeod) Miller, was born at Louisville, St. Lawrence County, New York, May 24, 1847. Pursuing his earlier studies in the common schools and academy in his native town, he later entered the St. Lawrence University at

JOHN STOCKER MILLER.

Canton, New York, and received his bachelor's degree from that institution with the class of '69. He then entered upon the study of law in the legal department of the same university, and in the following year was admitted to the bar at Ogdensburg.

Mr. Miller did not at once enter upon the practice of his profession, but devoted himself to teaching, becoming professor of mathematics in his alma mater during the school year of 1871-72, and of Latin and Greek for the two years, 1872-74. He then resigned, and in the early part of the year last mentioned came to Chicago.

Mr. Miller's preparation in the law had been most thorough and his preceptors men of high standing at the bar. As a natural result of this he had no difficulty in securing a foothold and building up a satisfactory clientage from the beginning of his career in this profession. From 1874-76 he practiced alone, and, following this time, in association with George Herbert and John H. S. Quick, under the firm name of Herbert, Quick & Miller. After the death of Mr. Herbert some years later, the firm was continued under the name of Quick & Miller, until 1886, when Mr. Miller became associated with Senator Henry W. Leman. Four years later Merritt Starr was admitted to the firm, and since then George R. Peck has succeeded Mr. Leman, the style of the firm name being now Peck, Miller & Starr.

Mr. Miller has come to be ranked among the ablest and most successful chancery lawyers in Chicago, and his connections with numerous important cases of this nature, among them the "Flagler," "Riverside" and "Phillips and South Park" litigations, brought him prominently before the public. The manner in which he acquitted himself in these and other cases led to his being appointed corporation counsel of Chicago by Mayor Washburn in the spring of 1891.

This most important post Mr. Miller held for the following two years, and in this time was exceedingly active in behalf of the interests of the city in several cases against railroad companies, involving the elevation of tracks and extension of the city streets over the same. The celebrated "Lake Front" case against the Illinois Central Railroad Company was also argued by Mr. Miller in behalf of the city during this period. He retired from this office in 1893 and has since then devoted himself to general practice.

Mr. Miller is an influential Republican and a member of St. Paul's Protestant Episcopal Church in Kenwood. He is affiliated with the Union League, Chicago, Hamilton, Kenwood and other clubs. He was married December 12, 1887, to Miss Ann Gross of this city, and has two children, a son and a daughter.

William W. Gurley, prominent in transportation circles of the United States on account of his connection with several traction companies as general counsel, was born in Mt. Gilead, Ohio, January 27, 1851. He was the son of John J. Gurley, also a lawyer, who was a member of the constitutional convention of Ohio and who served as probate judge of Morrow County.

After attending the public schools of Mt. Gilead, Mr. Gurley entered Ohio Wesleyan University, and was graduated in 1870. During the year after his graduation he was superintendent of public schools of Seville, Ohio. He then gave up teaching, read law in his father's office and was admitted to the bar in June, 1873.

Mr. Gurley came to Chicago in September, 1874, and has been practicing law here since. His work has been principally corporation practice, and during his more than thirty years in Chicago he has organized and acted as general counsel of many large companies. He

became identified with traction interests first in 1888, when he aided in the organization of and became general counsel of the South Side Elevated Railroad.

He was one of the incorporators of the Metropolitan West Side Elevated Railroad, which was organized in March, 1892, and has up to the present time acted as general counsel of the company. In 1901 he was

WILLIAM W. GURLEY.

appointed general counsel of the Union Traction Company and has been brought prominently before the public since, owing to the protracted litigation between the company and city over the company's rights.

Mr. Gurley is a member of the Chicago, Union League, Washington Park, Chicago Golf, Exmoor, Country and Edgewater Golf clubs, The New York Club and the Transportation Club of New York City. His wife is a daughter of Joseph Turney, who served two terms as state treasurer of Ohio. Mr. and Mrs. Gurley and their one daughter, Helen Kathryn, reside at 528 North State street. Mr. Gurley's offices have been in the Marquette building for several years.

Charles H. Aldrich, one of the leading lawyers of Chicago and one of the foremost exponents of corporation law in the country, was born in Lagrange, Indiana, August 26, 1850. Both his father and mother, Hamilton M. and Harriet (Sherwood) Aldrich, came from the East, the former from Vermont and the latter from New York. The Aldriches spring from old English stock, though the family have been native Americans for the last few generations. As a boy Mr. Aldrich worked on his father's farm until the age of sixteen, obtaining in the meantime such elementary education as a common school would permit. His parents then moved to Orland, Steuben County, Indiana, to allow their children better educational advantages. Charles H. entered the Orland seminary at sixteen, and, completing his studies there, entered the high school at Coldwater, Michigan. Thence he went to the University of Michigan at Ann Arbor, graduating with the class of '75, receiving a bachelor's degree, classical course. In 1893 the faculty conferred upon him the honorary degree of M. A.

Mr. Aldrich began the practice of law at Fort Wayne, Indiana, then the second city to Indianapolis in the state in point of population, wealth and progress. From the outset he assumed a leading place at the Indiana bar. In 1884 he was urged by leading Republicans to become a candidate for the nomination to the state's attorney-general's office. Without making any campaign whatsoever to promote his candidacy, he fell short of the nomination by only a few votes. In 1886 he moved to Chicago. He gained a national reputation in the Central and Southern Railroad, the Union Pacific Railroad and the Western Union Telegraph cases, in

CHARLES H. ALDRICH.

which he successfully upheld the side of the federal government against the most eminent lawyers in the country. These cases both served to augment his professional reputation and practice, and led to his selection as Solicitor-General under President Harrison. After serving the Republican administration for several years he returned to Chicago to resume his private practice, which has since continued uninterruptedly. Among his

clients are some of the largest corporate interests in the West.

Mr. Aldrich is an ex-president of the Chicago Law Club and trustee of the Chicago Law Institute. He has also served as vice-president and member of committee of political action of the Union League Club. He was married on October 13, 1875, to Miss Helen Roberts of Indiana. They have a family of one son and two daughters.

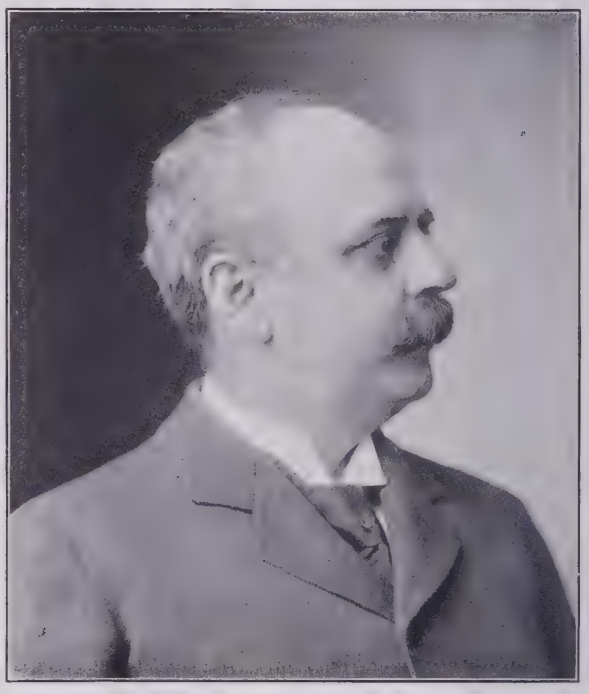
Charles S. Thornton was born in Boston, Massachusetts, April 12, 1851. He attended the public schools of Boston, including the Boston Latin School, and graduated from Harvard College in 1872. He came to Chicago and has remained here continuously since that date. He was admitted to the bar on examination by the Supreme Court of Illinois in the fall of 1873. He entered into active practice immediately, and has continued ever since. He entered into business relations with Mr. Justus Chancellor in 1883.

For many years Mr. Thornton has been the senior member of the firm which has always been known as Thornton & Chancellor, although for many years the

CHARLES S. THORNTON.

firm comprised eight practicing lawyers. Mr. Thornton has served the public as president of the board of education of Auburn Park, where he resides, and has been a member of the several boards of education of Illinois, Cook County and Chicago. He was corporation counsel of the Town of Lake and afterwards corporation counsel of the City of Chicago. His practice at the bar has been largely in the direction of corporation and real estate litigation. In politics he has always been a Democrat, and has managed several local campaigns for his party. He is a member of the Masonic and Odd Fellows orders.

Adams Augustus Goodrich. senior member of Goodrich, Vincent & Bradley, has a large practice in both the civil and criminal courts of Cook County. At different



ADAMS AUGUSTUS GOODRICH.

times he has been elected to the offices of state's attorney and judge.

Mr. Goodrich was born at Jerseyville, Jersey County, Illinois, January 8, 1849. His grandfather, Clark H. Goodrich, was one of the pioneer lawyers of the state, coming here in 1840 and becoming district attorney of the old first district, of which Peoria was then a part. Mr. Goodrich received his early education in the Jerseyville elementary and high schools.

When he was sixteen years old his uncle, Congressman A. L. Knapp, secured an appointment for him in the United States military academy at West Point. He followed his studies there for three and a half years, and when the course was almost completed decided to abandon his military prospects on account of ill health and a preference for a professional career. After a two years' trip through the West he began reading law in the office of his uncle, Robert M. Knapp, at Jerseyville, and later at Springfield, Illinois, in the office of the Hon. A. L. Knapp.

At the bar examination of 1873 he was admitted, and at once started to practice in Jerseyville. In 1878 he was elected state's attorney of Jersey County, and

re-elected with increasing majorities to the office in 1880 and 1884. In October, 1887, he resigned the prosecutor's office to enter the field as a candidate for county judge of Jersey County, and was elected to this office in November, 1887.

While still a judge he opened law offices in Chicago, and in 1889 moved here and made his permanent residence in this city. When Judge Richard Prendergast was county judge of Cook County, it was often necessary that he be absent from the bench, and during such occasions Judge Goodrich invariably was invited from his Jersey County bench to preside for him. Later Mr. Goodrich became attorney for the drainage board and had charge of the immense number of condemnation suits that were fought by that body.

Judge Goodrich is a Democrat in politics, and during the incumbency of the younger Mayor Harrison was chairman of the board of Bridewell inspectors. He has always taken an active part in municipal affairs, but has never been a candidate for any political office in Chicago.

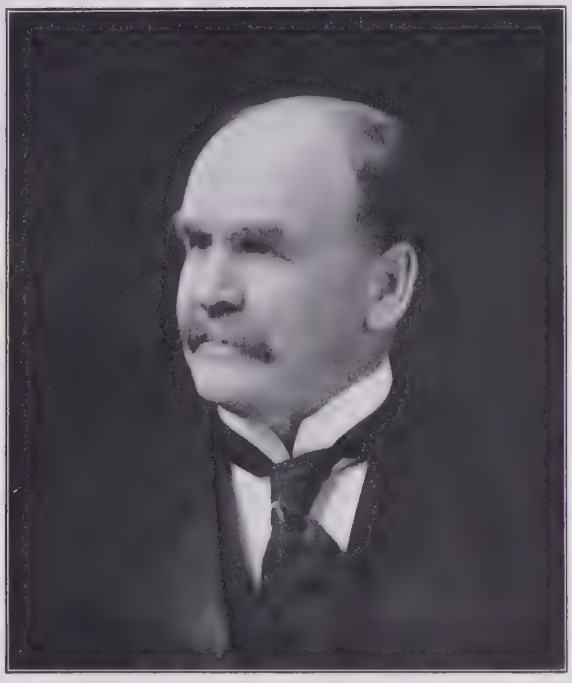
In 1895 he was appointed by Governor Altgeld one of the five trustees to select a location, establish and build the Northern Illinois Normal School. He was the first president of the board when the school was established at De Kalb. In 1900 he was re-elected for another five-year term.

Judge Goodrich is a Knight Templar, Odd Fellow and Knight of Pythias and a member of the Chicago Athletic, the Iroquois, the Washington Park, Chicago and other local clubs.

Albert J. Hopkins, junior senator from Illinois, is a distinctive product of the state he represents in the upper house of the Congress of the United States. He shares with General John A. Logan the distinction of being the only native born Illinoisan to represent his state in the Senate. As a lawyer and as a member of both houses of Congress, Senator Hopkins has a strong, clean and clear-cut record.

He was born on a farm in De Kalb County, August 15, 1846. This environment developed a strong, robust constitution and an ambition for a thorough education. To attain this end much self denial and painstaking economy was practiced. After the usual experience of the country boy in the district school and the town schools he entered Hillsdale (Michigan) College. He was graduated from this institution in the spring of 1870, and his alma mater has since honored him with the degree of LL. D. The bar was his aim from the start, and after graduation he studied law and commenced the practice of his profession at Aurora. He soon entered politics, and was elected state's attorney of Kane County in 1872, holding that office for four years. His record as state's attorney brought him a large and lucrative practice. He kept up his interest in political affairs and was a member of the Republican state central committee from 1878 to 1880, and was on the list of presidential electors on the Blaine and Logan ticket in 1884.

Senator Hopkins was first elected to Congress to fill a vacancy caused by the death of the Hon. Reuben Ellwood, during the Forty-ninth Congress. From then on he served continuously during the Fiftieth, Fifty-first, Fifty-second, Fifty-third, Fifty-fourth, Fifty-fifth, Fifty-sixth and Fifty-seventh Congresses. This service of nearly eighteen years in the House of Representatives gave him a leading position in the Illinois delegation in Congress. During the time he served



ALBERT J HOPKINS.

on many of the leading committees of the House, notably the merchant marine and fisheries, post-offices and postroads, and ways and means. The importance of his work on the ways and means committee, which is the most important committee in Congress, extended over a period of twelve years. The sub-committee which framed the Dingley law was guided in a large measure by him. As a member of that sub-committee he helped to frame all the tariff legislation that has been enacted by Congress since the McKinley bill.

In 1902 when the Republicans of the state began to cast about for a suitable candidate for the senate to succeed the Hon. Wm. E. Mason, the logical man for the honor was Representative Albert J. Hopkins. For many years he had been one of the leading members of the Illinois delegation in the House, and this combined with his clean record as a lawyer and a citizen made him

the most available man. His choice was settled upon at the state convention in the fall of 1902, and this action was confirmed by the legislature in January of the next year. He took his seat in the Senate at the extra session of that body on March 4, 1903. Though one of the comparatively new members in the Senate his ability has been already recognized in his appointment on a number of the important committees. He is chairman of the fisheries committee and also member of the following: Commerce, corporations in the District of Columbia, Cuban relations, enrollment of bills, Interoceanic canals, Mississippi river and its tributaries, privileges and elections and disposition of documents. In the reorganization of the Senate at the coming session he will no doubt be recognized even more fully than he has been.

Senator Hopkins has always been a friend of labor and has taken an active interest in all legislation that tended to shorten working hours, and to ameliorate the condition of the working man. Much of the legislation that has improved the condition of the American sailor was secured by his active support and coöperation while a member of the committee on merchant marine in the House of Representatives. He has already taken a prominent part in the deliberations of the Senate concerning the building of the Panama canal. While the treaty between the United States and Panama was pending in the Senate he ably defended the action of the administration in recognizing the Republic of Panama, and in negotiating the treaty which secured the authority to the United States of constructing and maintaining the canal.

Senator Hopkins is a strong, virile individual. Intellectually and physically he might be said to be in his prime. His friends and constituents in Illinois look forward to seeing him take a leading and commanding position in the Senate of the United States within the next few years. Within recent years he has identified himself more closely with Chicago interests than formerly. The large practice that has come to him has necessitated his moving his law offices to this city, and he is now the senior member of the firm of Hopkins, Peffers & Hopkins, with offices in The Temple. His home he still keeps in Aurora. Senator Hopkins was married to Emma C. Stolp of Aurora. They have an interesting family of four children.

William S. Forrest, the celebrated criminal lawyer, was born in Baltimore, July 9, 1852. After receiving a thorough school education in his native city, he entered Dartmouth College, where he was graduated in 1875, with a classical degree. From Dartmouth he went to Boston, reading law there for three years. Coming to Chicago, he readily passed the Illinois bar examinations and commenced his practice.

Equipped with a comprehensive knowledge of the various branches of law and endowed with the gift of oratory, he has been peculiarly qualified to succeed in his particular branch of jurisprudence, criminal law, of which he has become one of the most eminent exponents in the country. He has figured in many notable cases which gave him a national reputation, of which the famous Cronin murder cases probably attracted the widest attention. In the John Lamb case, almost equally famous, Mr Forrest secured the defendant's acquittal after a four-year fight. In this case Lamb had been adjudged guilty of murder through circumstantial evidence, and sentenced to be hanged. The case was appealed, and the first decision reversed. The chief

WILLIAM S. FORREST.

point of contention was the liability of a conspirator for the acts of a co-conspirator. The Schank case was another where Mr. Forrest distinguished himself. Here he secured the acquittal of the defendant upon a murder charge by showing that the deceased party met his death through malpractice of the attending surgeon after the stabbing.

Another example of his astuteness was exhibited in the McLain brothers case, in which the defendants were charged by the federal government with using the mails for fraudulent purposes. The McLain brothers were prominent board of trade operators, and the charge was "bucket-shopping." Mr. Forrest raised the contention that bucket-shopping was gambling rather than fraud, and, after a month's argument, during which no evidence was introduced, the court sustained his point

and the men were discharged. He secured an acquittal in the case of the state against Officer John Baginski, charged with killing an Italian and wounding two others. In defending E. S. Dreyer, the banker, he secured a disagreement of the jury. The Chandler embezzlement case ended in an acquittal. In the first case of John Dalton, who had been sentenced to the penitentiary for two years for fraudulent use of the mails, Mr. Forrest carried the case to the United States Court of Appeals, and the decision was reversed. In the second case, where Dalton was tried for sending lottery advertising matter from one state to another, the prosecution introduced eighty-six witnesses, and the defense none, but the case ended in a disagreement. He secured the release of Alderman John J. Brennan, who had been convicted of election fraud, by having the decision set aside in the appellate court.

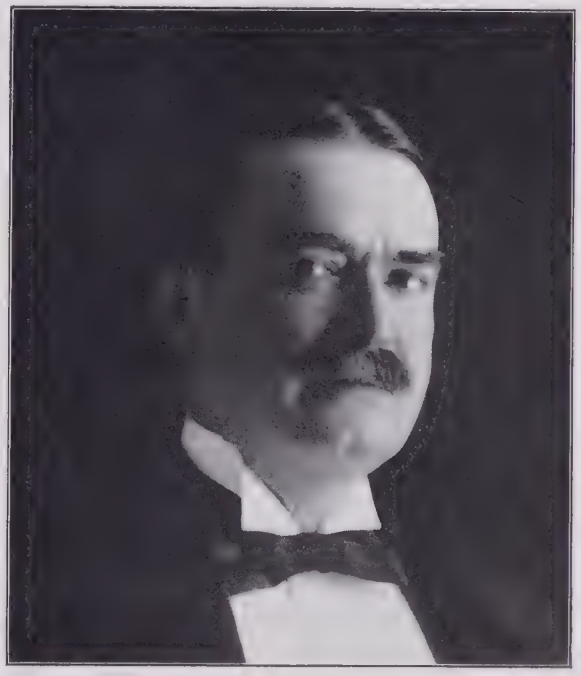
He also successfully defended Charles Spalding, Thomas J. O'Malley, John D. Snearly and James Maney, lieutenant of the Fifteenth United States Infantry, and Baron von Beidenfeld. He has been equally successful in conducting prosecutions, notably Mannow and Windrath, who were hanged for the murder of Carey B. Birch, Lake and Griswold, who received a life sentence for killing Patrick Owens, and Healy and Robbard, who were tried in Dubuque, Iowa, and sentenced for life for the murder of two private policemen. He was retained by the civic federation in 1894 to prosecute sixty-nine Democrats for election frauds. Three were sent to the penitentiary, and forty-nine were fined. He conducted the criminal prosecutions for the Chicago, Milwaukee & St. Paul Railroad for three years, securing during that time 189 convictions.

During his legal career Mr. Forrest has participated, either for defense or prosecution, in over two hundred and fifty homicide cases, in which his percentage of successes has been so great as to entitle him to his present high rank in criminal law.

Granville W. Browning was born at Indianapolis, Indiana, March 14, 1856. After graduating from the Literary Department of Michigan University with the class of 1877 he came to Chicago, read law in the office of the late William H. King, and was admitted to the bar in June, 1880.

Since his admission to the bar Mr. Browning has been actively engaged in the practice of his profession, devoting himself to real estate and corporation law. He was first a partner of Judge Samuel M. Moore, for a long time chancellor of the Superior Court, and afterwards was associated with Col. Alexander M. Woolfolk. Since 1898 he has been associated with Stuart G. Shepard. Mr. Browning was a candidate for judge on the Democratic ticket in 1893 and 1897, but both tickets went down in landslides. Mr. Browning received the highest number of votes cast for any candidate on the ticket in 1897.

Mr. Browning was appointed first assistant corporation counsel of the City of Chicago by Mayor Harrison, in July of 1897, and has represented the city as special counsel since 1899 in many important cases with uniform success. His most notable victory was in the famous "Lake Front" case, in the Supreme Court of the United States, which had dragged along in the courts in different forms for twenty years, the riparian rights and real property in dispute being estimated to be worth $100,000,000. Mr. Browning conducted the final litigation in the case, defeating the claims of the Illinois Central Railroad Co., to enlarge its use of the lake shore



GRANVILLE W. BROWNING.

along the entire Lake Front to Fiftieth street. He also won the case of the People's Gas Light & Coke Company against the city, in the Supreme Court of the United States, where all contract rights to charge one dollar per 1,000 feet of gas, as set up by the company, were defeated. He also won the Van Buren street tunnel case, wherein the Illinois Supreme Court ordered the West Chicago Street Railway Company to lower the Van Buren street tunnel, so that the navigation of the Chicago river might be restored. Mr. Browning took the position that the tunnel destroyed navigation and must be lowered as a nuisance at the company's expense and the Supreme Court sustained his position.

He has recently won the Westfall case, wherein one party sought to reduce Lake avenue south of Jackson Park to a street eighty feet wide, and others sought to

recover the entire street as private property. He obtained a decree, maintaining the street perpetually as a street 150 feet wide. Mr. Browning also won the League ball club case, establishing the militia law in this state; the Eisendrath case, recovering Sangamon street, for many years used as private property; the Shirk case, reclaiming the corner of Park Row and Michigan avenue, and restoring it to the public, and many other cases involving important public questions.

Mr. Browning has also been a Master in Chancery of the Superior Court of Cook County for some years. He is a member of the Fourth Presbyterian Church and of the University, Chicago, Onwentsia and Saddle & Cycle clubs and of the Law Club, the Bar Association and other organizations. Mr. Browning was married in 1903 and lives in the Twenty-first Ward.

Paul Brown of the law firm of Horton & Brown, although still a comparatively young man, has been prominent in legal circles of Chicago for a score of

PAUL BROWN.

years. He is the son of Dr. Henry T. Brown, one of the early settlers of Illinois, who came to McHenry County from New York. His mother is a native of Vermont. His primary and higher English education was obtained in the common and high schools of McHenry County, his native county.

After completing his high school course, Mr. Brown came to Chicago and studied law in the office of Hoyne, Horton & Hoyne, then one of the most prominent firms in the city. In the spring of 1885, he was admitted to the bar and a few months later was appointed Master in Chancery of the Circuit Court of Cook County. So well did Mr. Brown meet the requirements of the position that he was reappointed three times. In the fall of 1893 after eight years service he resigned in order to devote his entire time to private practice.

In 1889 Mr. Brown formed a partnership with Clarence A. Knight, and this continued until 1903. They were largely engaged in corporate and chancery practice and represented several railway companies as general solicitors. After leaving the firm of Knight & Brown Mr. Brown, in the fall of 1903, formed a partnership with Oliver H. Horton, then but recently retired from the Circuit Court bench, where he had served for sixteen years. While engaged in a general practice, the firm is counsel for a large insurance company and has recently administered the affairs of an elevator company, handling more than a million dollars in a year.

Mr. Brown is a member of the Union League, Midday and Calumet clubs. In 1888 he was married to Miss Grace A. Owens, daughter of O. W. Owens of McHenry County and they have a family of two boys and a girl.

Thomas S. Hogan, conspicuous in legal circles of Chicago, was born in Chicago, January 31, 1860. His father, M. W. Hogan, also an attorney, moved to St. Louis soon after the subject of this sketch was born, became state's attorney and held the office for twelve years and other state and municipal offices during his long residence in that city.

After graduating from the St. Louis University with the degree of Master of Arts, Mr. Hogan studied law in the office of Ex-Governor Reynolds of Missouri and Judge Irwin Z. Smith. He later attended the Washington University, where he obtained the degree of LL. B., and was admitted to practice in the courts of Missouri, April 10, 1882. Returning to Chicago in 1886, Mr. Hogan was within a month admitted to the bar of Illinois and has since been engaged in general practice in the state and federal courts.

In the course of his practice in Chicago Mr. Hogan has been engaged as counsel in much important litigation. As associate counsel for plaintiff he helped to secure the largest verdict ever rendered in a personal injury case, the amount being $40,000, in the case of Bush vs. the Northern Pacific Railroad Company. The case was heard before Judge Gresham in the United States Circuit Court. Mr. Hogan also represented Richard Mansfield in the litigation brought against the actor by S. E. Gross involving the authorship of the play, Cyrano de Bergerac. The case involving the title of the play, Sherlock Holmes, in which he represented Charles Frohman, William Gillette and Conan Doyle in the Supreme Court of Illinois was decided in favor of his clients. He also repre-

sented Mr. Frohman in the Little Minister case. In the Iroquois theater cases before the Cook County coroner he successfully guarded the interests of his clients, Klaw and Erlanger. He has been frequently called to other American cities and to London, England, to represent clients.

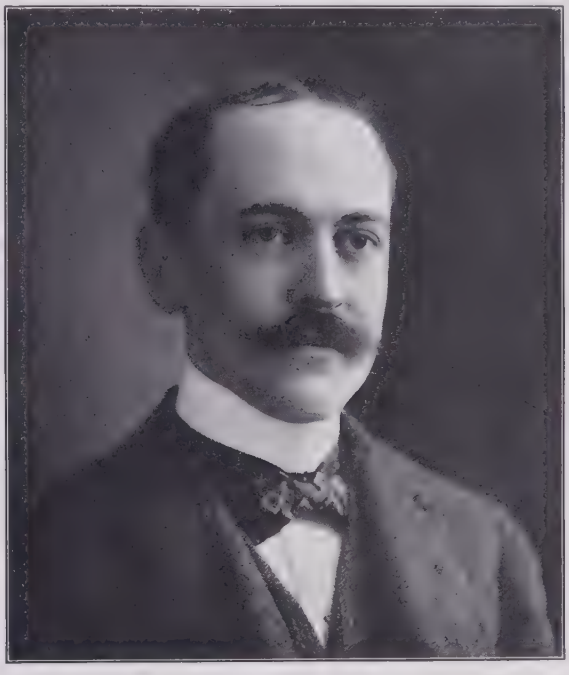
Mr. Hogan is a director in the National Printing & Engraving Company, the United Chemists' Association, the Credit Protective Association, the San Marcos Rubber Plantation Company, the Colonial Mining Company, the American Amusement Company and the United States Amusement Company. He is a member of many of the leading clubs of Chicago, and an honorary member of clubs in New York, Boston, St. Louis, London and Paris. At present he is a member of the firm Hogan & Hogan, which has an extensive practice throughout the country.

Mr. Hogan is not married and resides at 1578 Jackson boulevard. He has probably one of the finest private libraries in Chicago. He is the author of several plays and has a reputation for public speaking.

THOMAS S. HOGAN.

Mr. Hogan has never held a public office. Several times he has been tendered the nomination for judge, but has declined each time.

Edward J. Brundage was born at Campbell, New York, May 13, 1869, and attended the public schools in Detroit, Michigan. At the age of fourteen he entered a railroad office in Detroit, remaining there until the removal of the general office to Chicago, in 1885. Mr. Brundage at once took up the duties of the position at Chicago and remained with the company until 1898, at which time he had risen to the position of chief clerk. He studied law at night, was admitted to the bar in 1892, and was graduated from the Chicago College of Law the following year. In 1898 he was elected a member of the Forty-first General Assembly. He was appointed by Governor Tanner as one of the two vice-presidents from Illinois to the Pan-American Exposition and was later named as a member of the Illinois



EDWARD J. BRUNDAGE.

State Commission. In 1902 he was again elected a member of the Illinois General Assembly. He was elected president of the board of commissioners of Cook County on the Republican ticket in November, 1904. Mr. Brundage is engaged in the practice of law, and has represented the state on several occasions as special counsel.

John F. Smulski has achieved success in more lines of effort than often fall to the lot of a man of his age. He has been successful in business, in law, in politics and in the public service. For seven years he has been the president of the Pulaski Lumber Company, a prosperous and growing concern; with his father, William Smulski, he has been instrumental in building up an extensive and profitable publishing business; he has built up a lucrative law practice, and four times in the last eight years the people have approved his acts as a public servant by re-electing him by increasing majorities.

Mr. Smulski was born in German Poland in 1867, and came to this country when thirteen years old. His education was begun in Germany, but completed in this country, when he graduated from St. Jerome's College,

Berlin, Canada, in 1884. After his graduation he joined his father in the publication of the Polish Catholic Gazette, to which he devoted his energies for four years. It was the first Polish paper established in this country, its publication having been begun in 1871 by William Smulski, who came to America in 1869.

In 1888 Mr. Smulski decided to study law. He

JOHN F. SMULSKI.

graduated from the Union College of Law in 1890, and at once entered upon the practice of his profession.

But it is in politics that Mr. Smulski has achieved his greatest success. From boyhood he had taken an interest in the politics of his ward, always affiliating with the Republican party. In 1896 the Republicans of the Sixteenth ward insisted that he make the race for alderman against Peter Kiolbassa, the Democratic candidate. Mr. Kiolbassa had always been popular among the Polish voters, who largely constitute its citizenship, and he entered the contest with the prestige of having just come from two years' service as city treasurer. The ward was nominally Democratic by 3,000 majority, but Mr. Smulski was defeated by only sixty-three votes.

In 1898 Henry Ludolph, one of the Democratic aldermen, was killed in a railroad accident and Mr. Smulski was elected to fill the unexpired term. He was continuously re-elected alderman until 1903, when he was elected city attorney on the Republican ticket, being its only successful candidate. When he entered the office he found the dockets crowded with personal injury cases against the city, the damage claims aggregating $36,000,000. In two years he practically cleared the dockets and the first year reduced the average judgment against the city from $1,000 under his predecessor to $426. The next year he reduced the average to $273.

In the spring of 1905, Mr. Smulski was renominated for city attorney and again was the only Republican candidate elected. While the Republican candidate for mayor was defeated by 24,000 votes, Mr. Smulski was elected by a plurality of over 19,000 votes. In all his candidacies Mr. Smulski has never sought the office. In each race it has been a case of the office seeking the man.

Hugo Pam, member of the law firm of Pam & Hurd, was born in Chicago, January 20, 1870. He received his education in the public schools of Chicago, and graduated from the West Division High School in 1889. He entered the literary department of the University of Michigan, and graduated with the degree of Ph. B. in 1892. In the fall of 1892 Mr. Pam entered the law offices of Moses, Pam & Kennedy, and was admitted to the bar in January, 1894.

In February, 1897, Mr. Pam withdrew from the firm of Moses, Pam & Kennedy and opened his own office

HUGO PAM.

in the New York Life building. By this time his reputation was such that his services were in wide demand, and in 1898 he became a member of the firm of Pam, Donnelly & Glennon and continued as a member of the firm of Pam, Calhoun & Glennon, after Judge Donnelly had been elevated to the circuit bench. Mr. Pam now is a member of the firm of Pam & Hurd, the two other

members of the firm being his distinguished brother, Mr. Max Pam, and Mr. Harry B. Hurd.

Mr. Pam is a strenuous worker, and the knottier the problem at hand the more enjoyment does he take in its solution. As an advocate, his command of the details of a case when addressing court and jury, and his accurate knowledge of the law, have won him a high position at the bar. In addition to a large general practice, his firm numbers among its clients many of the large corporations in the country.

In conclusion, it may be said that Mr. Pam is a thorough American in his ideals and sentiments. He is a Republican in his political affiliations, but he is not a politician, since to him the study and practice of his profession is everything. He holds membership in many social and professional clubs, but he is not a club man for the same reason that he is not a politician.

M. W. Borders, one of the leading members of the Chicago Bar Association, is general counsel for Nelson Morris & Company, meat packers. His rise in the law has been steady. He was born on a farm in Randolph County, Illinois, May 9, 1867, the son of James J. and Mary A. Borders. He was graduated from Monmouth College in 1888 and began his study of law in the office

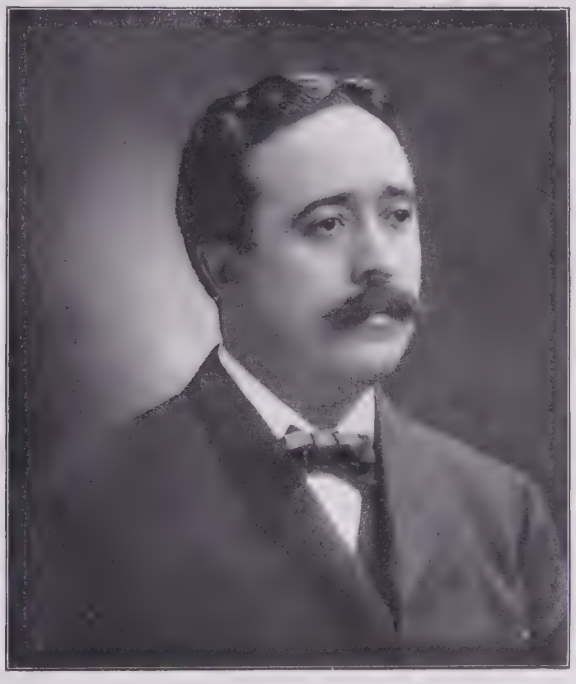
M. W. BORDERS.

of Keorner & Horner in Belleville, Illinois, and was admitted to practice before the courts of the state in 1890. For the term of 1890-91 he attended the Columbia Law School, New York City, and on July 15, 1891, he formed a law partnership with James M. Hamill for the practice of his profession in Belleville. This partnership continued for ten years.

Mr. Borders was city attorney of Belleville for two terms, was master in chancery of St. Clair County two years and occupied an enviable position in his general practice. In April, 1903, he moved to Chicago to become the general counsel for Nelson Morris & Company.

Mr. Borders was married in February, 1892, to Miss Alice Emma Abbey of Kirkwood, Illinois. He has four sons, James, Melville, Edward and Horatio, aged twelve, eight, ten and six years, respectively.

He is one of the prominent club men of the city, being a member of the Elks, the Chicago Athletic, the New Illinois Athletic, the Mid-day, the Iroquois and the Colonial clubs.



JAMES J. GRAY.

James J. Gray, master in chancery and formerly president of the board of Cook County assessors, is a native of Chicago. Since his birth, November 23, 1862, he has lived in the Twenty-first ward, on the North Side. After obtaining an education in the Chicago public schools and a business college, he secured a position with the printing firm of J. M. W. Jones & Co., remaining in their employ until 1893, when he became deputy probate clerk, studying law in the meantime. In 1895 he became one of the deputies, being assigned to Judge Tuley's court as minute clerk and record writer.

He was admitted to the bar in 1896, and a year later, resigning his deputyship and associating himself with M. J. Moran, he established the law firm of Gray & Moran, with offices in the Ashland block.

In 1897 Mr. Gray was elected assessor of the north

town in a rattling campaign, in which he ran 4,000 votes ahead of the Democratic ticket. In his own ward he received 900 more votes than Carter H. Harrison, the mayoralty candidate. He was re-elected in 1898, and the following spring he was made a member of the Cook County board of assessors, serving with that body for six years. He was president of the board during 1903 and 1904. He was re-nominated in the fall, but was defeated in the Roosevelt landslide, in which, however, he ran 40,000 ahead of Judge Parker in Cook County. He was appointed master in chancery by the circuit bench.

Mr. Gray is a member of the Chicago Athletic, the Iroquois and the Germania Clubs and a number of fraternal societies.

Charles McGavin, member of the National House of Representatives for the Eighth Illinois district, is one of the youngest men in Congress. His rise in politics has

CHARLES McGAVIN.

been rapid. When twenty years of age he lost his left arm in a railroad accident, which decided him to abandon a business career and study law. He has met with signal success.

Representative McGavin was born at Riverton, Sangamon County, Illinois, June 10, 1874, being the youngest of a family of ten children. He attended public school at Springfield until eleven years of age, when he went to make his home with a married sister at Mount Olive, Illinois, his mother having died when he was but six years old. At Mount Olive he attended the grammar and high schools and there made the acquaintance of Representative William A. Rodenberg of East St. Louis, who at that time was principal of the Mount Olive High School. At the age of fifteen he entered the office of the Smithboro Coal Company at Smithboro, Bond County, Illinois, as a clerk, his brother-in-law being interested in the firm. His sister's family, with whom he was living, removed to Springfield in 1890 and he went with them. For a short time he was employed with the Sangamon Coal Company and afterward became connected with the agency of the Dupont Powder Company. The railroad accident in which he lost his arm occurred in 1894, and as soon as he had recovered he decided to take up the study of law, and entered the office of Orendorff & Patton as a clerk. Three years of close application to law followed, and in 1897 he was admitted to the bar. Seeking a wider field, he came to Chicago in 1899, where he has been a practicing attorney ever since. Mr. McGavin always took an active interest in politics, but it was not until 1903 that he began to take a lead in the Republican ranks of the Eighteenth ward. In this year he was nominated for alderman, but, the Eighteenth ward being strongly Democratic, he was defeated. The energetic campaign he conducted at the time attracted much attention, and in recognition of his ability he was appointed assistant city attorney under John F. Smulski. In the fall of 1904 he was nominated for Congress in the Eighth district, which is nominally a Democratic stronghold. Under normal conditions it has been carried by the Democrats by about 8,000 majority. Mr. McGavin made the most energetic campaign, and not only overcame the Democratic majority but polled 7,000 additional votes. Mr. McGavin is not married. He has offices in the Unity building, Chicago. He took his seat in Congress at the regular session, December, 1905.

Dr. Edwin Hartley Pratt, A. M., M. D., LL. D., illustrates by his life and achievements what may be won by persistent and painstaking effort. Not only is he one of the leaders in his chosen profession, but also a diligent student of all that is best in literature and the broader affairs of the world.

Dr. Pratt was born in Towanda, Pennsylvania, November 6, 1849. He comes of a family whose names are well known in the annals of medicine and surgery. His father was the celebrated Dr. Leonard Pratt. His mother, before her marriage, was Miss Betsey Belding, and of English descent.

In recognition of his merit, and the great part he has taken in advancing the science of medicine and surgery, Dr. Pratt has had many honors conferred upon him. The University of Chicago honored him with the degree of Doctor of Laws in 1886. He received his master's degree from the same institution in 1874. One year

previously he earned his doctor's degree at Hahnemann Medical College of Chicago.

He is an honorary member of the Ohio Medical Society, the Missouri Medical Society, the Kentucky Medical Society and the Southern Association of Physicians. He is an active member of the Illinois State Medical Association, the Chicago Academy of Med-

DR. EDWIN HARTLEY PRATT.

icine, the American Institute of Homeopathy, and numerous less prominent medical organizations.

The science of orificial surgery is a triumph of Dr. Pratt's scholarly and untiring efforts. He is the pioneer in this branch of medical thought and is the author of a handsomely illustrated volume on the subject which has run into its fourth edition.

Lincoln Park Sanitarium was built for Dr. Pratt's use, and was a mecca for a steadily increasing throng of physicians seeking to master the principles of orificial surgery. The patronage of the institution was large and consisted of only the more advanced and best members of the profession.

Dr. Pratt was married to Miss Charlotte Kelley, February 26, 1900. Aside from his large and lucrative practice, Dr. Pratt finds time to devote many spare hours to the literature of the day. His library is one of the finest private collections of books in Chicago.

In physique, Dr. Pratt is of a commanding stature—six feet in height, weighing 250 pounds and finely proportioned. His mentality shows the cheerfulness and hopefulness of his celebrated father, and the energy, courage and perseverance of his mother.

Alexander Hugh Ferguson, M. D., C. M., professor of surgery in the Chicago Post-Graduate Medical School and Hospital, was born in Ontario County, Canada, February 27, 1853, the son of Alexander and Ann (McFadyen) Ferguson, both natives of Scotland. He received his education in the common schools, Rockwood Academy, Manitoba College, Toronto University and Trinity Medical School, from which latter institution he was graduated in 1881. He received post-graduate training in New York, Glasgow, London and Berlin, where he took a thorough course in bacteriology under the celebrated Professor Koch.

Dr. Ferguson began the practice of his profession in Buffalo, New York, but in 1882 he went to Canada and settled in Winnipeg, where, in the same year, he was appointed registrar of the College of Physicians and Surgeons of Manitoba, and in the following year he took a most active part in founding the Manitoba Medical College, which has had a phenomenal success, and now enjoys the name of being one of the high-grade medical schools of Canada. He was professor of physiology and histology in this institution for three years, and in 1886 he took the professorship of surgery upon the resigna-

ALEXANDER HUGH FERGUSON.

tion of Dr. James Kerr, who now holds a similar chair in Columbia University, Washington, D. C. He was a member of the staff of the Winnipeg General Hospital, surgeon-in-chief to the St. Boniface Hospital, and also the chief operator at Brandon and Mordon hospitals in the same province. He was the first president of the Manitoba branch of the British Medical Association, and he was also appointed by the Governor as a member

of the Provincial Board of Health. His connection with the Manitoba Medical College covered a period of eleven years, and he was identified with it, not alone as registrar, but also as treasurer and a member of the University Council. He enjoyed the respect and confidence of the profession and people, as well as the loyal devotion and veneration of his students, and when he severed his connection with the Hospital of the Sisters of Charity before leaving Canada to locate in Chicago, his resignation was not accepted, in the hope that some day he might return.

On December 18, 1893, Dr. Ferguson was offered the chair of surgery in the Chicago Post-Graduate Medical School and Hospital, and assumed his duties in June, 1894. Since locating here his services have been in great demand, and he now holds the position of surgeon to the Post-Graduate Hospital, surgeon-in-chief to the Chicago Hospital, also surgeon to the Cook County Hospital for the Insane, and consultant to the Provident Hospital.

It has been as a teacher of surgery and as an operator that Dr. Ferguson has gained his wide reputation. There is hardly a major operation on the body that he has not performed. His work on Hydatids of the Liver has been the most extensive of any man in America, and was instrumental in first bringing him into notice. He has successfully performed partial hepatectomy, splenectomy, nephrectomies, craniectomies, thyroidectomies, hip-joint amputations, excisions, thoracoplasty, (Schede) cholecyst duodenostomies, appendicectomies, etc., all of which would be too numerous to mention. Suffice it to say that Dr. Ferguson has opened the abdomen over a thousand times. He was the first to use Murphy's button to unite the duodenum to the stomach after removing a cancerous pylorus, and he was also the first to make an anastomosis with Murphy's button after excision of a cancerous cecum, in both of which cases he was successful.

The doctor has been an extensive contributor to the medical press. It is only possible to mention a few of his more important papers, among which are: Hydatids of the Liver, Operative Treatment of Diseases of the Gall Bladder, Pylorectomy in America, Thoracoplasty in America and Visceral Pleurectomy, with Report of a Case, Typic and Atypic Operations for the Radical Cure of Hernia.

Dr. Ferguson is recognized as one of the best surgeons in Chicago, and all his time is devoted to the teaching and practice of surgery. He is a member of the British Medical Association, International Medical Congress, American Medical Association, Chicago Medical Society, Chicago Gynecological Society, the Physicians' Club of Chicago, Chicago Surgical Society, Military Tract Medical Association, Wayne County Medical Society, and also a fellow of the Chicago Academy of Medicine and of the American Association of Obstetricians and Gynecologists.

In religion he is a Presbyterian. He is a member of the Scottish Rite, thirty-second degree, A. F. and A. M., and other societies. He was married in 1882 to Miss Thomas, daughter of the late Edward Thomas, Esq., a wealthy pioneer of Nassagaweya, near Guelph, Ontario, Canada. His family consists of two sons, Ivin Havelock and Alexander Donald.

Dr. Frances Dickinson. The day was chill—frost was in the air. Company shivered in the old-fashioned parlor of Mrs. Thomas Church, and marveled at the coatless, hatless little girl on the street. "Pity? Please don't!" said Mrs. Church. "That little girl with the bright eyes and long brown braids never wears hat nor coat. She is the daughter of my neighbor, and 'neath the front steps you will find she has hidden her wraps, rolled in a bundle."

She was on her way to school, the old Dearborn school, opposite McVicker's theater, where they used to receive children at the age of five. At recess she was most popular and in great demand by the boys; both sides wanted her. She never could "bat," but she was the very best shortstop catch.

Again we see her in front of her home (where Carson, Pirie, Scott & Company is now located) on Wabash near Madison street, a happy, light-hearted, wholesome girl, walking the new curbstone, one of the first the city put down, and as she romped and played we noticed the old-fashioned garden, with its flowers and its cabbages, and saw her sisters, Hannah and Melissa, and her brothers, Albert, Charles and Nathan, come and go. The little girl was Frances Dickinson.

To-day Dr. Frances Dickinson is one of the most intelligent, industrious and successful women in the city of Chicago. She was born in Chicago, January 19, 1856; graduated at the Central High School in 1875. The next four years were spent as a teacher in our public schools, but, finding the scope limited, and having decided to enter the medical profession, she abandoned her first work for the broader field. Accordingly, in 1880 Frances Dickinson matriculated at the Woman's Medical College in Chicago, where she took the full course and proved an earnest student, graduating in 1883.

She served as interne in the Women's and Children's Hospital, under Dr. Mary Harris Thompson. Having meanwhile resolved to make a specialty of ophthalmology, she took the course in that branch at the Illinois State Eye and Ear Infirmary, Chicago. In 1883 in London Dr. Dickinson studied under the celebrated surgeon, Dr. Cooper, in the Royal Ophthalmic Hospital at Moorfields, and also attended the ophthalmic clinics at the Royal Free Hospital in Gray's Inn Road.

In Germany, at Darmstadt, she was for five months under the private tutorship of Dr. Adolph Weber, who had a large private clinic and hospital of sixty beds attached to his home. This was the Dr. Weber to whom Von Graefe, the "father of ophthalmology," willed his instruments, and under so devoted a teacher she could hardly have failed to receive lasting benefit and inspiration.

Dr. Dickinson is the leading woman practitioner in her specialty in this country. At one time she enjoyed the distinction of being the only woman engaged as post-graduate instructor in ophthalmology, filling that chair in the Chicago Post-Graduate School of Medicine. She is president of Harvey Medical College, where she fills the chair of ophthalmology.

Dr. Dickinson is an active and honored member of the City and State Medical societies and of the American Medical Association, of the Chicago Ophthalmological Society, the American Academy of Political and Social Science and the Chicago Academy of Sciences. She was the first woman received into the International Medical Congress, in which she was admitted to membership at its ninth convention, held in 1887 at Washington, D. C. Since that year women have not been denied membership, in spite of the fact that congresses have been held in foreign cities, where women are not allowed equal privileges with men at the universities.

Many of Dr. Dickinson's maternal ancestors were physicians, and in the paternal line are found a number of schoolmasters; and in both lines we find them frequently being honored with and honoring public office. Her father, a man of broad character and wide sympathies, was a prominent business man in Chicago for many years. His wife, Ann Eliza Anthony, like himself, was a native of Massachusetts, a woman of strong personality and the organizer of the First Society of Friends in this city, and an aunt of the famous woman suffragist, Susan B. Anthony.

The first of the Anthony family of whom there is any mention is William Anthony, born in Cologne, Germany, who came to England during the reign of Edward VI, and was made chief graver of the royal mint and master of the scales, continuing to hold office through the reigns of that monarch and Mary and part of the reign of Elizabeth. His crest and coat of arms are entered in the royal enumeration. His son Derrick was the father of Dr. Francis Anthony, born in London in 1550. He graduated at Cambridge with the degree of Master of Arts, and became famous as a physician and chemist, but was intolerant of restraint and in continual conflict with the College of Physicians and Surgeons. He died in his seventy-fourth year, and was buried in the church of St. Bartholomew the Great, where his handsome monument is still to be seen. Dr. Anthony left a daughter and two sons, both of whom became distinguished as physicians, and John, the elder, founded the American branch of the family. He was born in Hempstead, England, and sailed for America in the ship Hercules, April 16, 1634.

Dr. Dickinson's brothers developed The Albert Dickinson Company of this city, which is the leading firm dealing in grass seeds the world over. This unique and extensive business further exemplifies the organizing ability of the doctor's family.

Dr. Dickinson was the first woman to hold a large down-town meeting for women, bringing the women together to hear Mrs. Chant at Central Music Hall in 1889. She was also a party to the forming of the first

DR. FRANCES DICKINSON.

Union of Physicians, regardless of the pathies. They are now united on sanitation.

During the World's Fair, Dr. Dickinson was a member of the Board of Lady Managers, and in connection with Dr. Waite formed the first medical union composed of women of the various schools of medicine —the Illinois Medical Women's Sanitary Association— which immediately sent Dr. Kate Bushnell, Dr. Alice Ewing and, later, Dr. Rachel Hickey, to the scene of the Johnstown disaster. They were the first on the ground to commence the relief work, and remained seven weeks in the prosecution of their noble purpose.

Dr. Dickinson is one of the most progressive women of the day, one of the best known club women of America, as well as one of the leading oculists of this country, a woman who commands respect and holds attention.

Samuel W. Allerton has all the characteristics of the New York Yankee. He is quick to conceive an idea, cautious in determination of its value, resolute in its accomplishment when once he has decided upon a course of action, and it must also be said that he is public-spirited as well as mindful of his personal welfare. Born in Duchess County, New York, in 1829, of farmer parents, and with only such advantages of education as could be gained from the somewhat inefficient public schools of the first half of the century, Mr. Allerton has attained commercial, social and political distinction. He is a director of the First National Bank and of the Chicago City Railway Company and has large interests in the principal stockyards of the United States. Mr.

SAMUEL W. ALLERTON.

Allerton has not achieved wealth by any gigantic speculation; he has built his fortune on the sure and honorable foundation of industry, economy, sound judgment and resolute action.

He worked on a farm until he was eighteen years of age; then he began stock raising on his own account. By the time he was twenty-one he had accumulated nearly $5,000. That was nearly sixty years ago, and sixty years ago $5,000 had a larger operative power than it now has. With this capital Mr. Allerton purchased a stock farm in Piatt County, Illinois. Yet even then Chicago had its fascinations for Mr. Allerton. He was a frequent visitor to the future metropolis, but always with intent to sell or buy. He soon became famous as a successful breeder and raiser of stock. His farms increased in number and his flocks and herds in value and magnitude. He also was a shrewd purchaser of real estate in what was to be the great city of the West. He was among the first to discern the needs and uses and profits of stockyards as centers of the cattle trade and was among the earliest and most active promoters of the system. And thus, by the exercise of strict industry, strict integrity and sound judgment, Mr. Allerton has achieved rank among the millionaires of the country.

But it is not alone as a financier that Mr. Allerton is known and respected. His political acumen is as remarkable as his commercial capacity. Few moves are made on the Republican checker board of Illinois without the knowledge of Mr. Allerton. He never has sought office, but in 1893 the Republican nomination for mayor literally was thrust upon him. He made a gallant fight, but it was an "off year" for Republicans, and that past master of political tactics, the late Carter H. Harrison, defeated him. In the same year Mr. Allerton rendered great service to the public as a member of the World's Fair directory. Mr. Allerton has been twice married. He has two children, Robert H. and Katie R.

Frankin Harvey Head, a gentleman who has demonstrated the compatibility of literary instinct and culture with business acumen, was born January 24, 1835, at Paris, Oneida County, New York. His father, Harvey Head, and his mother, who prior to her marriage was Miss Calista Simons, came of families long resident in the vicinity of Paris. Mr. F. H. Head received a sound preparatory education at the Academy in Cazenovia, New York, and afterward enrolled as a student in Hamilton College, and was graduated as B. A. in 1856, and received the degree of M. A. three years later. He was also graduated from the law school of his alma mater in 1858, and subsequently was honored by it with the degree of LL. D.

In 1858 Mr. Head settled in the West, and in conjunction with his uncle, Mr. O. S. Head, founded the law firm of O. S. & F. H. Head, at Kenosha, Wisconsin. The firm continued in existence and enjoyed a lucrative practice for about nine years, when Mr. F. H. Head was compelled by failing health to retire from so sedentary a business. After spending a time in Europe he went to Utah and to California, in which states he acquired proprietary interests in a cattle ranch and in a mine. Supervision of their business occupied his attention, and was productive of profits for three or four years, when, his health being restored, he returned to what in those days were called "The States" by settlers in the Far West, and entered into partnership with Messrs. Wirt Dexter and N. K. Fairbank in the manufacture of lumber and charcoal iron at Elk Rapids, Michigan. While exercising a general supervision over these large industries, Mr. Head made his home in Evanston, Illinois, for several years. In the meantime

he acquired interests in banking and manufacturing enterprises in Chicago, of which city he became a permanent resident about ten years ago. Mr. Head served for several years as president of the Chicago Malleable Iron Company, and as director of the American Trust and Savings Bank, and of the Northwestern National

FRANKLIN HARVEY HEAD.

Bank, in all of which institutions he retains a considerable interest.

In addition to the successful management of numerous business enterprises, Mr. Head has found time to contribute many interesting articles on financial and commercial questions to The Forum, the New England Magazine, Current Topics and to other high-class periodicals. Though actively Republican in politics, Mr. Head never has aspired to office. He was, however, intrusted by the national administration with the superintendency of Indian affairs while resident in Utah. He has twice been president of the Union League Club, and is a member of the Commercial, Chicago, University, Literary and Quadrangle clubs. Mr. Head was married in 1860 to Miss Catherine Putnam Durkee of Kenosha, Wisconsin. There are three daughters. He has an elegant home at No. 2 Banks street.

Jacob L. Loose, the organizer and first president of the American Biscuit & Manufacturing Company and a prominent figure in the western cracker and confectionery trade, was born in Pennsylvania, June 17, 1850. At the age of ten he removed to Illinois with his parents, who settled in Springfield, but the boy was sent back to his native state to complete his education. His first business experience was as a clerk in a dry goods store in Decatur, Illinois. In 1870, together with his elder brother, he established a store in southern Kansas, on what was then the frontier. There he remained until 1882, when he went to Kansas City and engaged in the biscuit and confectionery business.

Before long he conceived the idea of consolidating the western trade for mutual protection and advancement and in competition with the New York Biscuit Company of the Atlantic coast. The result was the inception of the American Biscuit & Manufacturing Company, with himself as its president. He held this position for seven years, until ill health compelled him to abandon business duties for some time. The formation of the American company was unique, inasmuch as there was no common stock or outside capital used, no promoter's fees paid or any "rake-offs" allowed. It was singularly free from the stock jobbery that usually accompanies such operations.

Mr. Loose traveled extensively in Europe and the Orient until he regained his health. Since then he has resumed his interest in the baking and confection trade, being one of the ruling spirits of the Loose-Wiles

JACOB L. LOOSE.

Cracker & Candy Company of Kansas City, which plant employs from a thousand to twelve hundred hands. Mr. Loose is also largely interested in bakeries at Minneapolis, St. Louis and Dallas, Texas.

Daniel Francis Crilly, one of Chicago's representative real estate men, and the man who is generally spoken of as "the father of McKinley Park," was born at Mercersburg, Franklin County, Pennsylvania, October 14, 1838. Mr. Crilly's parental grandfather was a

native of Ireland where the Crilly family is an old one. A descendant of the Crillys is now a member of the British parliament. Mr. Crilly's father was John D. Crilly, editor of the Perry County Standard, published at Bloomfield, Pennsylvania. Mr. Crilly was educated in the common schools of Pennsylvania, and at the age of seventeen he was indentured to John Wilson, a contractor and mason. On the latter's removal to Iowa City, Iowa, Mr. Crilly accompanied him in 1856. After serving his apprenticeship young Crilly sought an opening for his talent in Louisiana. He erected the extensive buildings on the plantation of the Hon. Richard Pugh, which were considered the finest of their kind in those days. After perilous adventures during the

DANIEL FRANCIS CRILLY.

years of the war of the rebellion, Mr. Crilly reached St. Louis and later Chicago. Here he spent his first three winters as superintendent of the tank department in the packing plant of Robert Law. His summers he devoted to building. He erected the first Methodist Church block, and many prominent down-town structures, steadily acquiring extensive real estate holdings.

He retired from the contracting business in 1878, and has since devoted much of his time to the management of his own property. He built all the residences in Crilly place, on the North Side. He lost heavily in the great fire, but regained it all and more by his energy, integrity and indomitable perserverance. The "Crilly Divisions" near the south end of Lincoln Park, are his property, among other holdings, which comprise 141 flats, twelve residences and ten business buildings. He also owns the old Stock Exchange building.

It is difficult to estimate what a city like Chicago owes to such men as Mr. Crilly, who gave it the best part of his life. His name stands for everything that represents solidity and morality. He was appointed South Park commissioner by the Circuit Court in 1900 to fill the unexpired term of Commissioner Ellworth, who took up his residence in New York. At the end of this term Mr. Crilly was re-elected for a five years' term. He filled the office of president of the commission for one term. It was on Mr. Crilly's suggestion that McKinley Park was named after our martyr president, and the handsome McKinley monument which he unveiled July 4, 1905, is said to be to a large share the donation of Mr. Crilly. He carried on the work of the subscription for the balance of the required sum for the purchase of the monument.

Mr. Crilly was married in Loudon, Pennsylvania, March 3, 1863, to Miss Elizabeth Snyder. He is the father of six children, Erminnie, George S., Frank L., Edgar, Isabelle and Oliver D. Mr. Crilly has been a pew holder of the Plymouth Congregational Church since it was built, and is now one of its trustees.

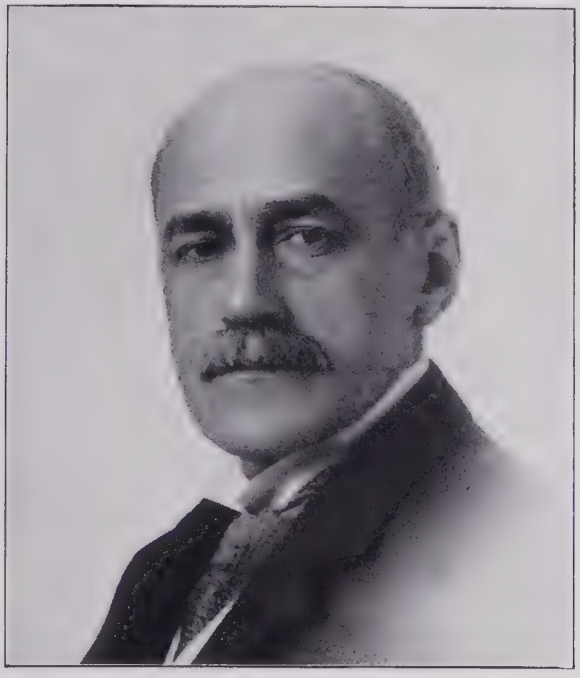
He is a member of the Hamilton Club, one of the first-year members of the Union League Club, a member of the Sheridan Club and a charter member of Home Lodge, No. 508, Ancient and Accepted Masons. Mr. Crilly has for years been treasurer of the Apollo Commandery No. 1, and is now a trustee. He is also prominently connected with other lodges. He has been the treasurer of the Knights Templar Charity Ball since its organization, with the exception of one term. Mr. Crilly has always been active in national and local politics and he was a member of the famous executive committee of the McKinley Club, which was organized by the leading Republicans of Chicago.

John Sutphin Jones. In the ranks of the sound and substantial business men of this land of opportunity are many illustrations of success earned by sturdy and honest endeavor, and wealth and position won by those who started without any advantages beyond the common, and have worked their own way to the top. No better example of self-earned success and prominence in the business world can be cited than is afforded by the career of Mr. John Sutphin Jones, now one of the foremost coal operators of the country.

His parents, William R. and Elizabeth M. Jones, were of Welsh birth, and from their native Montgomeryshire, in North Wales, came to the United States in 1831. They settled on a farm in Fayette County, near Washington Court House, Ohio, and it was there that their son John was born January 4, 1849. He was brought up on the farm and did his share of the farm work while attending the neighboring schools, and when he had absorbed the branches of knowledge pro-

vided by the common schools of the locality, he became a telegraph operator for a year.

While so engaged he became impressed with the opportunities of a railroad career, and determined to fit himself for that service. He began as freight brakeman and soon advanced to a conductor's position, first



JOHN SUTPHIN JONES.

on a freight train and later on a passenger train. From that position to trainmaster and assistant superintendent, and then by another step to superintendent, he advanced by faithful and efficient service. Leaving Ohio he became division superintendent of the Milwaukee, Lake Shore & Western Railroad in Wisconsin, holding that position until 1889, when he resigned it to become western manager of the Columbus & Hocking Valley Coal & Iron Company, with offices at Chicago. He gave efficient management to the large interests placed in his hands by that company and supervised the erection of several coal docks and after a while retired to establish the business of the Jones & Adams Company, operating coal docks at Ashland and West Superior, Wisconsin and Duluth, Minnesota, with offices at St. Paul and Minneapolis, and general offices in Chicago. The company do a large jobbing business in coal, own and operate coal mines in the Springfield and Danville regions, and also in the Hocking Valley District in Ohio. A chartering office for the shipment of the company's products to their docks on Lake Superior is maintained at Cleveland. Of the business carried on by this company, Mr. Jones is the principal owner, and he is also president of the National Hocking Coal Company, which owns 40,000 acres of coal lands in Ohio. He is connected also with the Buckeye Steamship Company, which owns several boats engaged in the coal and iron trade on the Great Lakes.

These successive steps were each of them earned by energetic methods and the application of practical ideas to every undertaking in hand. Mr. Jones is regarded as one of the foremost representatives of the great mining industry of the Middle West. His success has been rapid and continuous, and yet prosperity such as he has enjoyed does not occur by accident. Persistency in effort toward the achievement of his plans has brought legitimate fruitage in a career that has been continuously prosperous.

Mr. Jones was married at Granville, Licking County, Ohio, October 22, 1884, to Miss Sarah F. Follett, only daughter of Dr. and Mrs. Alfred Follett, and has added a life of domestic happiness to a career of financial prosperity. He has for years been identified with the Masonic order and is a member of Apollo Commandery, Knights Templar, and of Medinah Temple in the Ancient Arabic Order of Nobles of the Mystic Shrine. He is a member of the Union League, Kenwood, Washington Park, Mid-day and Midlothian Golf clubs, and is as popular in his social relations as he is prominent in business life. Mr. Jones and Mrs. Jones still retain the old house at Granville, Ohio, as a summer home, and a farm to which he is much devoted, now called Monomoy Place.

HOMER H. PETERS.

Homer H. Peters, who has been identified with various enterprises since his coming to Chicago in January, 1889, is one of the city's substantial business men. He is a native of Michigan, having been born at Scio,

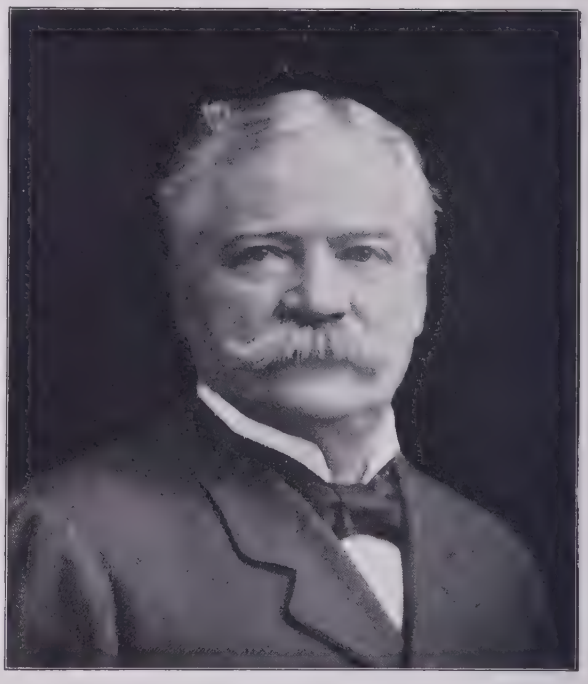
that state, January 20, 1854. He is a graduate of Ann Arbor.

For fifteen years Mr. Peters was a member of the Chicago Board of Trade, being connected with the firm of Bartlett, Frazier & Co., now Bartlett, Frazier & Carrington. In 1903 he was made president of the Buffalo, Dunkirk & Western Railroad Company (electric), to the duties of which office he now devotes the major portion of his time. He is also president of the Crescent Oil, Asphalt & Gas Company. He is one of the most successful business men of the city, and is well and favorably known by financial men not only in Chicago but through the country generally, both east and west. He is vice-president of the First National Bank of San Diego, California, where he has a beautiful winter residence, considered one of the handsomest homes on the Pacific coast. He also has a beautiful home at 5528 East End avenue, numbered among the finer residences of the city.

Washington Porter is a fine representative of a class much more numerous in Chicago and throughout the United States than is suspected by the politicians and professional traders in nationalities. He is of good English stock, both on the paternal and maternal side. The family of Porter was known for full three hundred years among the large landed proprietors of the English County of Norfolk, whence Thomas W. Porter, father of Washington Porter, came to the United States in 1830. He married Miss Charlotte Lane, also of English birth. Mr. Thomas W. Porter, settled first in Buffalo County, New York, in which place he engaged actively in merchandising, but in a short time the hereditary instinct for land owning and management of agricultural affairs asserted itself, and he moved to Boone County, in this state, and became a successful farmer on a large scale. Washington Porter was born at the Boone County homestead, October 26, 1846, and was educated first in the public schools of the neighborhood, and afterwards at the high school of Belvidere.

After some preliminary commercial experience in the country, Mr. Washington Porter came to Chicago in 1869. He was then twenty-three years of age, and, true to the instincts of his family, began to exploit the great fruit-growing resources of the Far West. During his first year of residence in this city he shipped the first full carload of fruit that ever came to Chicago from California. This was simultaneous with the opening of the first transcontinental railway. At a later period Mr. Porter furnished the money for the planting of the first orchard and vineyard in Fresno County, California. Fresno is now one of the great fruit-producing regions of this continent, but in 1869 it took men with such perseverance and courage as Mr. Porter always had displayed in the management of business affairs to promote what seemed to many a visionary project. In 1869 Mr. Porter also brought the first full carload of bananas to Chicago from the Isthmus of Darien, or Panama, as it is now generally called. Mr. Porter maintained an active commercial interest in the fruit trade between the Pacific States and the states of Central America and Chicago, until his retirement a few years ago from active business. He now enjoys the ease and dignity of a large property owner, whose fortune is the result of foresight, energy and honesty.

The public life of Mr. Porter has been of signal benefit to the citizens of Chicago. He was one of the small, resolute and brainy coterie to whose efforts the establishment of the World's Columbian Exposition in Chi-



WASHINGTON PORTER.

cago was due. He was a member of the committee appointed to wait upon Congress with intent to secure legislation favorable to Chicago, and from the first day of the session of 1890 until the passage of the act by which the metropolis of the West was designated as the place to which the eyes of the world should be turned in 1893, as the center of the most wonderful exposition ever made of the arts, sciences, agriculture and manufactures of all nations, Mr. Porter was incessant in argument with representatives and senators from all the states. During the constructive period of the great enterprise Mr. Porter was an active member of the Ways and Means Committee, and when the great exposition was an accomplished fact he was chairman of the sub-committee of directors, under whose management the first half-dollar souvenir coin was sold for the fabulous sum of $10,000. He was also a member of the

committee for reduction of expenditures, by the efforts of which the running expenses of the great institution were reduced from $23,000 to $15,000 per day. At the close of the exposition Mr. Porter made strong efforts to have the great Manufactures building removed from the exposition grounds to the Lake Front, there to remain as one of the attractions of the park that is taking the place of the old dreary waste of cinders that used to stretch from Randolph to Twelfth street. The destruction of the World's Fair buildings by fire rendered the public-spirited plan of Mr. Porter nugatory. It may be said, in passing, that Mr. Porter was among the first, and probably absolutely the first, to advocate and champion the permanent improvement of the Lake Front into a spacious and elegant plaisance.

Mr. Porter has a good war record. He enlisted at the age of sixteen years in the Ninety-fifth Illinois Volunteers, and was in action at Champion Hill and at the Siege of Vicksburg, participated in the Red River Expedition and was seriously wounded in the affair at Gunstown, Mississippi, June 10, 1864.

Mr. Porter is a Mason of high degree, a member of the Washington Park and Athletic clubs, and of several other social organizations. He married, June 11, 1891, Miss Frances Paulina Lee of Chicago. Mr. and Mrs. Porter have three children, Paulina C., Washington and Frederick C. Porter.

John George Shortall, son of John and Charlotte (Towson) Shortall, was born at Dublin, Ireland, September 20, 1838. When he was between two and three years of age his parents emigrated, with their family, to this country, joining an elder branch that had been long settled in New York City.

After the death of his parents, the subject of this sketch was employed by the late Horace Greeley in the editorial rooms of the New York Tribune, and here, for the following three years, he was brought in close contact with Mr. Greeley and other master minds who molded the public opinion of the day. This period in his life proved to be a period of education that he feels he could in no way have dispensed with.

In the summer of 1854, following the advice of Mr. Greeley, he came West, and located in Galena, Illinois, where he was engaged for a short time upon the construction and survey work of the Illinois Central Railroad, then building between that place and Scales Mound. Late in the fall, however, he came to Chicago and secured a position on the Chicago Tribune, but soon afterward withdrew from the newspaper business to enter the office of J. Mason Parker, where he took up the study of real estate law and titles, a profession he has followed to the present time. He is a member of the Illinois bar. When Mr. Shortall entered this office Mr. Parker was engaged in preparing the real estate abstract books, afterward known as the Shortall & Hoard Abstracts, and which are now the property of the Title Guarantee and Trust Company of Chicago, of which Mr. Shortall is a director.

At the time of the fire of 1871, the firm in which Mr. Shortall was interested was one of the three abstract firms in Chicago. Each saved a portion of its records, but no one set was complete. A consolidation was therefore effected between them, and Mr. Shortall remained actively connected with his associates in the conduct of the business until 1873.

Mr. Shortall has led an active life along other than purely business lines. In musical, literary, educational and social circles he has been especially active. For

JOHN GEORGE SHORTALL.

years he was one of the directors of the old Philharmonic Society, and afterward president of the old Beethoven Society, during almost its entire existence. For years also he was a director of the Chicago Public Library, and served three terms as president of the board. It was under his administration that plans for the present superb Library building were selected and that the negotiations were conducted which finally secured Dearborn Park as the site for the erection of the structure.

Along few lines of work, however, has the name of Mr. Shortall become so widely known as through his connection with the Illinois Humane Society. He was one of the organizers of this commendable institution in 1869, and in 1877 was chosen its president, a position to which he has ever since been annually elected. Mr. Shortall was also instrumental in the founding of

the American Humane Association in 1877, and was elected its president in 1884, being re-elected in 1892, and annually thenceforward to 1898, inclusive. At the World's Fair he was chairman of the Men's Committee on Moral and Social Reform of the Auxiliary Congresses, and conducted the Humane Congress in October, 1893, which was so successful.

In social circles he is a member of the Chicago Club, the Chicago Literary Club and the Reform Club of New York. He is also an honorary member of the Amateur Musical Club of Chicago and of the Pennsylvania Society for the Prevention of Cruelty to Animals. He was married September 5, 1861, to Miss Mary Dunham Staples of Chicago, who died August 24, 1880, leaving one child, John L. Shortall.

George E. Lincoln, general western manager for the Mergenthaler Linotype Company, is one of the best known men in the country among members of the printing and publishing trade. From the time when he completed his apprenticeship in Philadelphia until he took up his permanent residence in Chicago in his present position, he traveled through the United States first as a journeyman printer and later as the representative of the Mergenthaler Company.

When the company opened a branch in Chicago on January 1, 1902, Mr. Lincoln was sent here to take charge. At that time he had been with the company longer than any other traveling man. Mr. Lincoln had always urged strongly the opening of a Chicago branch office and the fact that its monthly business is now almost as great as that of the New York office is evidence of his sound judgment.

Practically all of Mr. Lincoln's life has been spent in various branches of the printing trade. He was born in Lancaster County, Pennsylvania, September 2, 1848. When he was three years old the family moved to a farm along the Pennsylvania pike, near Parkesburg, Chester County. Mr. Lincoln still makes it a practice to spend several weeks each summer on the old homestead. He left the farm when a boy and started in as a printing apprentice at Ashmead's book office in Philadelphia, the first establishment in the United States to use a power press. He completed his apprenticeship when twenty-one years old and suddenly decided to come West. After his first trip to the West, Mr. Lincoln traveled back and forth across the country working as a printer in hundreds of towns and cities. At one time he was part owner of the North Missouri Courier of Hannibal and also proprietor of a brewery in the same town. At another time he published a string of Colorado mining town papers. Again he was a plainsman with the J. & J. outfit. In 1880 Mr. Lincoln went on the road selling printing material. In 1886 he entered the employ of the Mergenthaler Linotype Company. In the first four years of that company's existence, on account of temerity of publishers and violent opposition from printers, not a machine was sold. The promoters spent $2,000,000 pushing the invention before the printers realized that with its aid they could make money easier and quicker than by setting type by hand. Since then the sale of the machines has been rapid. In the United States there are now 10,000 in 2,000 different offices. Though the matrices

GEORGE E. LINCOLN.

must be replaced, the machines never wear out and Nos. 30, 31, 32 and others are still in use in the office of the New Orleans Times-Democrat. The company estimates that 20,000 more machines will be needed before every office in the United States is supplied. Matrices are manufactured for twenty-seven different languages.

The Chicago branch was first located in small rooms on Dearborn street, but so rapid was its growth that it was soon moved to its present quarters in Steinway Hall, 17 Van Buren street. From twenty-five to forty new machines are shipped from this branch monthly. More than 6,000,000 matrices of type sorts are kept constantly in stock, besides the complete alphabets. The office handles all of the territory between Pennsylvania and Utah.

Mr. Lincoln is married, but has no children. He is a member of the Chicago Athletic Association and the Chicago Commercial Club and various fraternal organizations.

Jacob Levi Kesner, in less than twenty years rose from the position of cash boy to be general manager of The Fair, one of the largest department stores in the

world. Starting in October, 1887, as cash boy at $2.50 a week, he was advanced from time to time to bundle wrapper, cashier, salesman, floorwalker, buyer, assistant manager and then to head control of the entire business, which position he has held since January 1, 1895.

He was born in London, England, December 30, 1865, the son of L. J. and Sarah (Staal) Kesner. He came to Chicago with his parents in boyhood and received a common school education at the Scammon and Haven schools. For a time he also attended business college. Devoting himself conscientiously to whatever task his employers set him to do, he soon won their confidence and was rewarded by a consistent advancement of position. In addition to his holdings in The Fair, Mr. Kesner has other large interests. He is president of the Strowger Automatic Telephone exchange and other business organizations.

He was married in Chicago, August 30, 1887, to Miss Bettie Frohman. They have one daughter, Lucile. He is a member of Sinai congregation. Mr. Kesner is a Republican in politics and belongs to the Hamilton and Standard clubs. He has a beautiful residence at 4756 Grand boulevard.

OSCAR F. MAYER.

Oscar F. Mayer, of the firm of O. F. Mayer & Brother, came to Chicago from Detroit in 1876, and began his successful career as an independent packer, with his brother as business associate, on the present site of the firm's plant at Sedgwick street and Beethoven place. Its packing houses, refrigerating plant, smoke houses and auxiliary premises, such as sausage houses, pickling vats and shipping rooms, are said to be the best equipped in Chicago. The products of Mayer & Brother are well known throughout Illinois, Iowa and Wisconsin, and have proven formidable in competition with other provisions and "delikatessen."

The plant consists of two modern four-story buildings, with an aggregate floor space of 123,000 square feet. The salesrooms on the main floor are the largest on the North Side, and in direct communication with the capacious freezing vaults and refrigerators. The slaughter house, where all hogs for local sales as well as shipment are slaughtered, is one of the most sanitary and best equipped in Chicago.

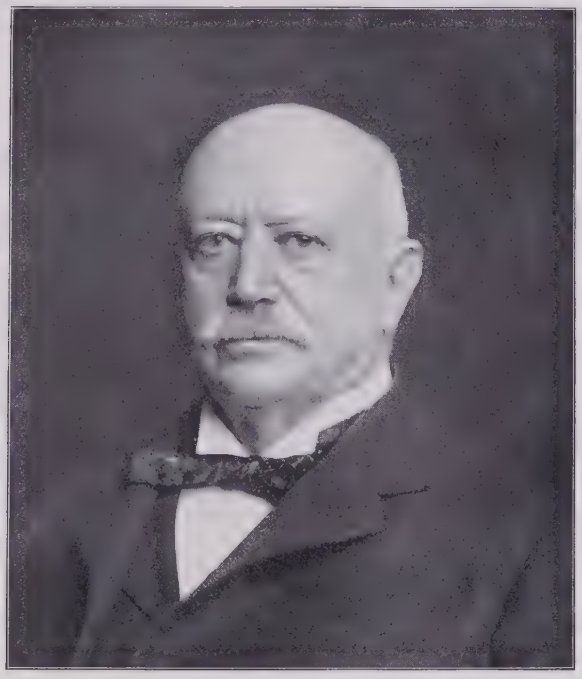
Oscar F. Mayer's brother, Godfried Mayer, is known as one of the ablest buyers and connoisseurs of hogs, sheep and cattle. Both members of the firm were practical butchers until the growth of their business compelled them to take the parts of supervisors and managers of their extensive trade and responsibilities. A short time ago a complete set of the most up-to-date machinery known to the provision trade was installed, and the working force was increased 80 to 100 men on the various killing floors, freezing vaults, cutting rooms and other departments. Mr. Oscar F. Mayer is one of the best known German-Americans in Chicago. He is a prominent mason, a member of the Germania Club, the Illinois Athletic Association, the Chicago Turngemeinde, Chicago Schuetzenverein, an ardent hunter, and a general sportsman.

Charles Enoch Morrill, son of Amos and Sarah (Eastman) Morrill, was born on a farm in East Kingston, New Hampshire, January 11, 1832. He was educated in the public schools of that district and at the age of sixteen took up the trade of a shoemaker, working two years at it. In 1850 he found better opportunities for his efforts in a country store at East Kingston, and entered the place as a clerk, which store he later on bought out.

In 1858 he was employed by the firm of Stimson, Valentine & Company, manufacturers of varnishes and paints, as a shipping clerk, which position he held for four years. At the end of that time he was made a traveling salesman, and in 1882 became manager of the Chicago branch of the company. During the same year he organized the Lawson Varnish Company, and was made president of the concern. He maintained his connection with Valentine & Company, however, and in 1898, when the two companies consolidated under the name of Valentine & Company, he was made vice-president of the consolidated company and two years later was made president, which office he holds at the present time. The concern is one of the largest varnish and color companies in the world, and has offices in New York, Chicago, Boston, Paris, London and Amsterdam.

Mr. Morrill is a Democrat in politics and is a mem-

ber of the Union League and Washington Park clubs. In 1857 he was married to Miss Adeline Susan Carter, and has three children, Mr. Allan A. Morrill, Mrs. Susie A. Cole and Mrs. Annie S. Hays. His residence is at



CHARLES ENOCH MORRILL.

275 East Fifty-third street, but much of his time is spent at his summer home in New Hampshire.

Professor Theophilus Noel, founder and president of the Theo. Noel Company, is a personality of remarkable characteristics. From his boyhood days until the present time the story of his experiences and adventures reads like the pages of a popular and thrilling romance. In commerce, politics and even in the literary history of the nation he has taken a conspicuous and successful place.

Professor Noel was born at Niles, Berrien County, Michigan, in July, 1840. His father was the village physician and a man of influence in the neighborhood. Theophilus Noel was the youngest boy of the family, and upon him devolved the duty of chief aid to his father, first as messenger and eventually as assistant in the medical practice. In these years of early training under this stern and exacting parent were acquired the habits of self-reliance and uprightness which form a strong part of Professor Noel's character.

In September, 1853, the elder Noel sold his Michigan farm and started with his family for Texas. Though at the time Professor Noel was only twelve years of age, every detail of that transaction and the incidents of the long trip down the Mississippi to New Orleans and across the country to Seguin, Texas, is still vivid in his memory.

That part of the country was then a wild and only sparsely settled section of the frontier. Here Theophilus Noel educated himself. His text books were Cobb's Speller, Pike's Arithmetic and Webster's Elementary Spelling Book. The first book he ever read was the Life of Washington, and from it was acquired much of his hatred of monarchs and despots and his love for the free born, independent and sterling American citizen.

When the Civil War broke out, young Noel was naturally found on the side of the Confederacy. His frontier experience stood him in good stead and, as a Texas Ranger, he took a prominent part in the field, while in the affairs of state of the "lost cause" his shrewd business judgment was often of value. After the war Mr. Noel was one of the foremost ones in helping to heal its scars and bring about a better feeling of harmony between the North and South. He helped to organize the Confederate veterans of Chicago, and was a warm personal friend of Generals Grant and Logan.

Professor Noel has been interested in many noteworthy commercial ventures. His first was the placing of a superior grade of cotton seed on the market. Next came the introduction to the fruit world of the famous Alberta peach. But the greatest was the discovery of Vitæ-ore. Professor Noel recognized the medicinal properties of the mineral, and organized the corporation

PROFESSOR THEOPHILUS NOEL.

which bears his name, for the purpose of putting these properties in such form as to be valuable to mankind.

In his spare moments during travel or rest he has found time to prepare a comprehensive autobiography covering every detail of his life from babyhood to the

present time. It is one of the most novel and interesting books one would care to read. Full of the strong philosophy and hard common sense of the author, it is highly appreciated by his friends who have been so fortunate as to receive a copy.

Charles A. Plamondon is one of Chicago's leading business men and public-spirited citizens. He has twice held public office, but in each case the office called for great sacrifice on his part and for the qualities of public spirit that he possesses. As a member of the Chicago Public Library Board for four years, he gave the devotion to his work which is often most required in positions that are the farthest removed from the limelight. For a year he was president of the board. While Mr.

CHARLES A. PLAMONDON.

Plamondon was a member of the library board many of the important innovations and improvements in its management were inaugurated and it was through his energy that many of them were put into use.

Mr. Plamondon has for four years been a member of the Board of Education. For one year he was vice-president of the board and at another time was a prominent candidate for president. In this capacity, too, his work has been tireless. In many respects the work of the board of education is the most important in the life of the city. In all the perplexing problems of education and finance that have come before the body, Mr. Plamondon has shown an enthusiasm and a grasp of general educational and business conditions that have made him one of the leading factors.

As a business man, Mr. Plamondon has been known mostly through his connection with the A. Plamondon Manufacturing Company, founded by his father during the early days of the city. He entered the employ of his father in 1872, then a boy of 16. When his father died, February 19, 1896, he was made head of the company and has held that position since. He is also vice-president of the Saladin Pneumatic Malting Construction Company and a director of the Fort Dearborn National Bank. He has also been a director of the Illinois Manufacturers' Association and was president of that organization for a year.

In May, 1900, following the sinking of the Spanish fleet in Manila Bay, Mr. Plamondon was made chairman of the reception committee during the Dewey celebration. In 1903 he was chairman of the Chicago Centennial Committee, which conducted the celebration of Chicago's 100th anniversary, or the settling of the first white man in the city.

Mr. Plamondon was born at Ottawa, Illinois, September 14, 1856. Shortly after his birth his family moved to Chicago. He was sent to the Chicago public schools where he received the major portion of his education. In social circles Mr. Plamondon has taken a leading part and is one of the best known men in the city. He is a member of the Chicago Athletic Association, the German Männerchor and the Washington Park Club.

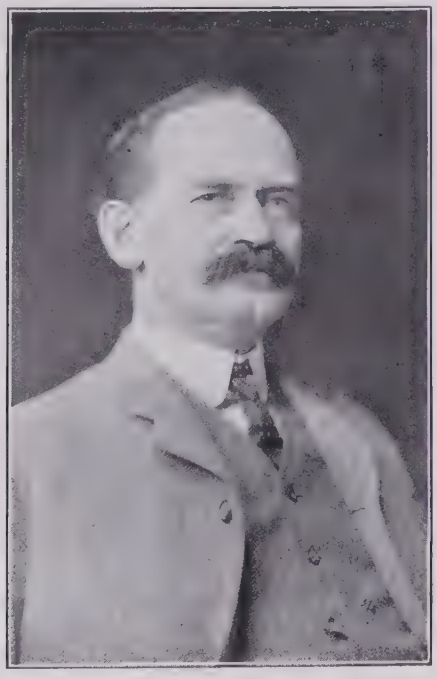
Charles L. Bartlett is a comparatively recent addition to the coterie of progressive western business men who have made the name of Chicago synonymous with enterprise and success. The earlier years of Mr. Bartlett's business career were passed in the East and he came to Chicago as local manager of the Procter & Gamble Distributing Company only ten years ago. At present Mr. Bartlett is Chicago manager for this great soap company, and also president and controlling factor in the organization of the Orangeine Chemical Company.

Mr. Bartlett was born at Fishkill-on-the-Hudson, November 13, 1853. Shortly afterwards his family moved to Hartford, Connecticut, where he received his earlier education. After being graduated from the high school of that city he entered Yale University. He received his college degree as a member of the famous Yale class of 1876. The first business experience of Mr. Bartlett, after his college days, was in the actuarial department of the Connecticut Mutual Life Insurance Company of Hartford. He left this position in 1880 to start in the brokerage business at Utica, New York. In this he was financially successful, but after ten years' experience became disgusted with the fundamental principles of the business and decided to withdraw from all speculative ventures. In 1890 he sold his interests in order to associate himself with the business of the Procter & Gamble Company.

He was at once made manager of the New York State interests of the concern. So marked was his suc-

cess in this position that when the firm cast about for a progressive manager of the Chicago office of the Procter & Gamble Distributing Company, Mr. Bartlett was sent west in 1895.

In 1899 Mr. Bartlett started the business of the Orangeine Chemical Company, which has now grown to world-wide proportions. He has been the president of



CHARLES L. BARTLETT.

the corporation since its inception. One day when physically depressed, Mr. Bartlett happened to meet his friend, William Gillette, the playright and actor. Gillette gave him a powder which he always carried for such occasions, and Mr. Bartlett tried it with unexpected relief. After further test of the remedy for fatigue, colds, headaches and minor ailments, the Orangeine powder became a factor for both his household and staff of employees. So accurate and invariable were the results in the saving of time and strength from pain and sickness, that Mr. Bartlett decided to extend the Orangeine prescription for public usefulness, and from this decision has resulted its present wide sale and appreciation.

The Hamilton National Bank, 80 La Salle street, was founded in 1903, with Mr. Bartlett's coöperation. He has been one of the directors of the financial institution since its organization. Mr. Bartlett is an entertaining conversationalist, of a sociable nature and a member of many clubs. In Chicago he is a member of the University Club, the Chicago Club, the Saddle and Cycle Club, the Onwentsia Club and the Merchants' Club.

Robert M. Simon, former recorder of deeds for Cook County and now a member of the State Board of Equalization from the Tenth Congressional district, was born on the North Side, February 17, 1866. He is the son of Simon Simon, one of Chicago's most respected citizens. After attending the public schools and graduating from the Lake View High School in the class of 1883, he went to work. He took an interest in politics from the start and soon became an able worker in the Republican party.

Mr. Simon in 1894 was elected collector of Lake View by the largest plurality ever received by a Republican candidate for that office. He was chosen recorder of deeds in 1896 and was re-elected in 1900. Between 1896 and 1900 Mr. Simon was secretary of the Cook County Republican Central Committee, an office to which he was duly elected in 1898. He has repeatedly headed the delegations from his district in Republican conventions. Few men in politics enjoy the confidence of his fellow party leaders as does Mr. Simon, his most distinguished characteristic being his stanch loyalty to his friends. Honesty and economy have been the predominating factors of Mr. Simon's régime as an

ROBERT M. SIMON.

office holder and he has filled the positions of trust to which he has been repeatedly elected to the satisfaction of the public. He inaugurated many reforms and introduced systems by which the work of his departments was greatly facilitated. The Torrens law became operative during his incumbency.

Mr. Simon married Miss Nellie Frances Ceperly and resides at 2561 North Ashland avenue, Ravenswood. He

is a leading spirit in social as well as political affairs in the district and was a founder of the Ravenswood Historical Society and Public Library. He is a contributor to many other public enterprises. In addition to being a Royal Arch Mason, Mr. Simon is a prominent member of many fraternal organizations, including the Royal League, National Union, Chicago Athletic Club, Hamilton Club, Ravenswood Club and Ravenswood Whist Club.

Charles J. Happel. Under the administration of Warden Charles J. Happel the two most important additions to the county hospital have been built and the daily average of patients has increased 150 owing to the growing confidence of the people in the

CHARLES J. HAPPEL.

institution. The new additions consist of an annex for children and a separate building for contagious diseases. The children's hospital is the only institution of the kind in Chicago and it owes its existence largely to the efforts of Warden Happel.

Mr. Happel first became connected with the county hospital in 1895, when he was appointed warden. Owing to the defeat of Mayor Swift's faction in the Republican party the following year Mr. Happel was superseded in the position, and was given the position of assistant superintendent of water-pipe extension by the mayor. In 1897 and 1898 he was superintendent of Douglas Park and in 1899 and 1900 was elected county commissioner.

When Daniel D. Healy was made warden of the county hospital in 1901 Mr. Happel was appointed assistant warden, and when Mr. Healy resigned the position to accept the Republican nomination for sheriff in 1902 Mr. Happel succeeded him, taking the position in August of that year. Mr. Happel soon after began to advocate the construction of a separate building for contagious diseases. Last year his plans were realized in the construction of a building costing $120,000, with beds for one hundred and fifty patients, completely isolated from the other hospital buildings. Mr. Happel also urged the building of a hospital where the children of the poor could have expert medical attention and nursing. In 1904 a building was erected which was opened in 1905, which provides one hundred and thirty beds for the little folk, who may be suffering from disease. The building cost $80,000, and contains all the modern appliances for the treatment, care and amusement of the small patients. These new buildings added 300 beds to the capacity of the hospital, increasing the number from 950 to 1,250.

Under Mr. Happel's administration the county hospital has become a popular sanitarium for the sick in moderate circumstances. In prior years the hospital was regarded with something akin to dread by the unfortunates who were compelled to go there. This feeling has worn away, and the institution is now eagerly sought as offering the best medical attention under the best sanitary conditions.

Mr. Happel was born in Chicago January 27, 1857. He obtained his education in the public schools and started in business in 1875 as a cigar manufacturer. He continued in the business until 1892. He had taken an interest in politics and his first political reward was the appointment as county agent in 1894. He served a year in this position, at the end of which he was appointed warden the first time.

Mr. Happel is married and has two children, Fred and Etta. He is a member of Herder Lodge A. F. & A. M., and other societies.

Thomas E. Barrett, sheriff of Cook County, was born in Chicago, on the north side of the river, obtained his education at the old Kinzie school at Ohio street and La Salle avenue, and, except the eight months he worked in a coal mine in Pennsylvania, has lived continuously in the north division of the city. More than sixty years ago Anthony and Rose Barrett, parents of Sheriff Barrett, came to Chicago, and took up their residence at the corner of Market and Erie streets, where the subject of this sketch was born April 30, 1863.

When Young Barrett was in his ninth year the fire of 1871 destroyed the Barrett home, and the future sheriff started out to help repair the family fortunes by going to work in a coal mine at Inkerman, Pennsylvania. He found the task of picking slate out of coal uncongenial, and at the end of eight months returned

to Chicago, where he got a job as errand boy with Field, Leiter & Co., but soon after entered the messenger service of the American District Telegraph Company. His real business career began, however, when he became a messenger boy for Brown, Fleming & Co., a board of trade firm, with which he remained for twenty-eight years.

In 1887 Mr. Barrett entered the brokerage firm of Boyden & Co., with which he remained until the death of Mr. Boyden, in 1894 or 1895, when the firm name was changed to J. F. Barrett & Co., which consisted of John, Tom and Tony Barrett. A few years afterward the firm name was changed to Barrett, Farnum & Co., which did business two and one-half years. On the dissolution of the firm, Mr. Barrett went into the grain brokerage business for himself, and was engaged in it when elected sheriff.

THOMAS E. BARRETT.

Sheriff Barrett has always been interested in sports, especially baseball and boxing, though handball, horse racing and other outdoor amusements have received a great deal of his attention. In 1880 he organized the old Whiting Baseball Club, which achieved a high reputation in amateur baseball circles. Mr. Barrett was one of the organizers, and was at the head of the city baseball league for fourteen years. He is still a liberal patron of the amateur as well as professional exhibitions of the national game.

As an amateur boxer, Mr. Barrett was for many years the idol of the Board of Trade and other local patrons of the pugilistic art. He met all the leading amateurs of his class in the West, and at a tournament in the old Athenæum gymnasium in March, 1887, won the middle-weight amateur championship of Illinois, in a contest with Frank Rheims. This victory satisfied his pugilistic ambition, and the following August he married and retired from the ring.

In later years Mr. Barrett owned and managed an extensive racing stable of runners and trotters, but a few years before his election as sheriff he disposed of his horses and gave up the turf. He has never ceased, however, to take an interest in racing as a sport.

Sheriff Barrett has always been a Democrat, and taken an active interest in politics. He was never a candidate for office until he was nominated for sheriff by the Democrats in 1902, when he was the only man on the Democratic County ticket elected. Except the candidate for sheriff all the Republicans on the county ticket were elected by pluralities ranging from 5,000 to 15,000, while Mr. Barrett defeated Daniel D. Healy, the Republican candidate, by nearly 7,000 plurality.

In August, 1887, Mr. Barrett married Miss Ellen McCoy. They have one child, a daughter, Josephine, now sixteen years old. Mr. Barrett lives in Ravenswood, in the twenty-sixth ward.

Francis O'Neill, chief of police of Chicago, is a type of officer of the old school. He rose from the ranks as a result of his strict attention to duty, his bravery and ability as a thief-catcher. Fearless and energetic his name stands without stain or reproach.

Born of Irish parentage in Tralibane, three miles from Bantry, County Cork, Ireland, on August 28, 1849, Francis O'Neill secured in the national school of Bantry a thoroughly sound education on all general subjects, including the classics. His father was an educated and well-to-do farmer, while his mother was one of the O'Mahoney's, an influential and historic name in the province of Munster.

Francis O'Neill was a bright boy, an omnivorous reader, an ardent student, and so distinguished himself in mathematics as to be named by his teacher, "Philosopher O'Neill." He was senior member of his class at fourteen years of age.

When barely sixteen and with the limited capital of five dollars he left home and started out in the world to seek his own fortune. He was advised to become a Christian Brother or a teacher in one of the Catholic schools. To having missed an appointment with Bishop Delaney of the City of Cork he attributes his failure to become a monk. He worked his way to Sunderland in the north of England in March, 1865, and after various vicissitudes shipped there as a cabin boy, sailing up the Mediterranean and via the Dardanelles, the Bosphorus and the Black Sea to Odessa, the great southern port of Russia. An accident in which he fractured his skull occurred during his return trip to Sunderland. He

next shipped to Alexandria, Egypt, where he remained nine weeks. During the course of the voyage he saved the boatswain from drowning, but received ill treatment instead of reward during the balance of the trip. He had some very interesting experiences in subsequent voyages, and finally shipped for New York at Liverpool in July, 1866, from which point he sailed to Santa Cruz, the West Indies, and many places in South America, returning to New York. He left for Japan on the "Minnehaha" of Boston a few months later and reached his destination after seven months of interesting and exciting experiences.

Ten weeks later the journey was resumed to Honolulu, Sandwich Islands, from where he went to Baker's Island in the Southern Pacific, where the vessel was wrecked entailing great loss and suffering.

After eleven days on this coral island the crew was picked up by a passing ship. The sailors were fed on one and one-half biscuits daily with a pint of unsweetened black tea for thirty-four days and landed at Honolulu. All, with the exception of three, Mr. O'Neill being one, were sent to the hospital. Mr. O'Neill's skill as a musician proved a valuable accomplishment on the voyage. Among the Kanaka crew of the rescuing vessel was a man who had evidently met the missionaries, for he could play one hymn fairly well on a concert flute. Mr. O'Neill being an expert on the instrument found a warm friend, and he was favored with a share of the Kanaka sailor's rations. For this reason Mr. O'Neill says he did not go to the hospital.

Arriving at San Francisco some months later, Mr. O'Neill decided on a change of occupation, hiring out as a care-taker of sheep. He was engaged for five months in the Sierra Nevada mountains in this capacity and then returned to New York, via Cape Horn, after a few weeks' stay at Culiacan on the west coast of Mexico.

After circumnavigating the globe before his twenty-first birthday, he decided to settle down and came westward, having saved a few hundred dollars, to establish a home. He settled at Edina, Knox County, Missouri, where he passed the examination necessary to obtain employment as a teacher in the district school during the winter of 1869.

He came to Chicago the spring of the following year and found employment on the lakes until the close of navigation that year. He married Miss Anna Rogers at Bloomington, Illinois, in 1870.

Chief O'Neill returned to Chicago in 1871 and found employment with the Chicago & Alton Railroad as laborer in the freight house. Promotion followed promotion, but the work being arduous and the remuneration small, he decided to try for a position on the police force. Having received his appointment under Elmer Washburne, he was sworn in on July 12, 1873, and assigned to the Harrison Street Station under Captain Buckley. He was shot the following month in an encounter with a burglar and still carries a memento of the episode in a bullet which penetrated his left breast and became encysted near the spine. By the unanimous vote of the police board he was advanced on the following day to regular patrolman on account of his bravery. In August, 1878, he was made police sergeant and transferred to the Deering Street Station. He was moved to the general superintendent's office by Chief of Police Doyle in 1884 and was advanced to patrol sergeant on January 1, 1887.

Three years later he was advanced to lieutenant, and, at his own request, Chief of Police Maj. R. W. McClaughry transferred him to the Tenth Precinct at Hyde Park, where he remained until recalled to Harrison Street Station by Chief of Police Brennan in July, 1893. The latter made him his private secretary the following month and he was promoted to captain and assigned in charge of the Eighth District, the Union Stock Yards, on April 17, 1894. Labor troubles and the memorable railroad strike of 1894 gave Captain O'Neill opportunity for new laurels and he personally directed his men against the disturbers, notwithstanding the attack of five thousand strikers thoroughly enraged by the state militia's action.

FRANCIS O'NEILL.

Chief of Police Brennan made public acknowledgement that in his opinion Captain O'Neill's command was deserving of the greatest credit in the strike trouble. Since that time Mr. O'Neill has risen rapidly in the

police department until he finally headed that institution, realizing his ambition. Chief O'Neill was a stickler on discipline, and after his elevation to the head of the department did more toward establishing a clean, wholesome and thoroughly reliable force than any of his predecessors had ever accomplished.

Chief O'Neill is the father of ten children, five daughters and five sons. Four daughters and four sons are now living. His youngest son, Rogers F., a collegian of much promise, died in 1904. Chief O'Neill is the only member in Chicago of the Cork Historical and Archæological Society. He belongs to no secret organizations, but is a member of the Police Benevolent Association. He is a keen business man and during his adventurous days in the police department he managed to invest his savings in real estate at much profit and a good income. His student mind and delight in reading have found an outcome in a well-stocked library, in which are quite seven hundred volumes devoted to Ireland and Irish subjects, many of them being extremely rare and valuable editions. One of the tangible results of his studies and research is the publication of a large quarto volume of the melodies of his native land entitled, The Music of Ireland. Nothing at all comparable to it has ever appeared in print and the demand for it in Ireland and Australia is as great as in America.

Chief O'Neill has served the city of Chicago in its police department longer than any man who ever became chief of police and has served in the office longer than any of his predecessors, excepting the late Joseph Kipley.

ILLUSTRATIONS.

	PAGE
The Inter Ocean Building	2
Survey of Chicago, 1830	12
View of Chicago, 1820	14
Fort Dearborn, 1853	16
City Hall	17
U. S. Government Building	19
Columbus Memorial Building	20
Great Northern Building	21
Floral Display	23
Stock Exchange Building	26
Auditorium Building	36
Chicago Savings Bank	37
Masonic Temple	46
Water Works	48
Western Union Building	52
International Harvester Company	58
Armour Institute	59
Public Library	62
Newberry Library	63
Art Institute	66
Bedford Building	69
Marquette Building	80
Reaper Block	83
Monadnock Block	87
Chicago & Northwestern Depot	94
Map Northwestern Railway	95
Map Chicago, Milwaukee & St. Paul Railway	96
Illinois Central Depot	97
Illinois Central Map	98
Grand Central Passenger Station	100
Map Chicago & Eastern Illinois Railroad	103
La Salle Street Depot	104
Polk Street Depot	106
Pullman Building	107
Map Chicago & Milwaukee Electric Railroad	115
First National Bank	122
Continental National Bank	124
Chicago National Bank	125
Commercial National Bank	126
Illinois Trust and Savings Bank	128
Merchants' Loan and Trust Company	129

	PAGE
American Trust and Savings Bank	130
Northern Trust Company	131
National Life Building	138
Board of Trade	142
Armour & Co.'s Plant	151
Armour & Co.'s Grain Elevators	153
Swift & Co.'s Plant	154
Old Myrick Stock Yards	155
Libby, McNeill & Libby's Plant	156
Miller & Hart Plant	159
Iroquois Iron Company's Plant	164
Scherzer Rolling Lift Bridge	165, 166
Hicks Locomotive and Car Works	160
Cummings Car Company's Plant	171
Chicago Bridge and Iron Works	172
Automatic Electric Company	174
Corn Products Plant	179
Marshall Field & Co.'s Wholesale Store	182
Marshall Field & Co.'s Retail Store	184
Gage Bros. & Co.	186
Spaulding & Co.	187
E. L. Mansur Company	188
George M. Clark Company	189
Brunswick-Balke-Collender Company	190
Peter Reinberg's Plant	193
Chicago Edison Company	195
Commonwealth Electric Company	197
People's Gas Light & Coke Company	198
Chicago Telephone Company	200
Illinois Tunnel Company	202
Northwestern Terra Cotta Company	224
Palmer House	229
Auditorium Hotel	230
Great Northern Hotel	231
Hotel Majestic	232
Bush Temple	244
Douglas Park	30, 39, 60, 84, 92, 160
Garfield Park	10, 34, 45, 54, 56, 73, 74, 91, 117, 149, 180
Humboldt Park	25, 29, 44, 64
Union Park	70, 76
West Chicago Parks	6, 75

INDEX.

PAGE

PREFATORY 5
CHAPTER I—Chicago's First Century 7
CHAPTER II—The Centennial Celebration 9
CHAPTER III—Early Chicago 11
CHAPTER IV—The Growth and Mayors of Chicago 24
The Mayors of Chicago 28
CHAPTER V—Chicago in War 35
CHAPTER VI—Chicago's Great Fire Disasters 38
CHAPTER VII—The Columbian Exposition 41
CHAPTER VIII—The Illinois and Michigan Canal 43
CHAPTER IX—Chicago's Water System 47
CHAPTER X—The Drainage Canal 51
CHAPTER XI—Chicago's Public School System 55
CHAPTER XII—Chicago's Libraries 61
CHAPTER XIII—Chicago as an Art Center 65
CHAPTER XIV—Churches of Chicago 68
CHAPTER XV—Chicago Parks 71
CHAPTER XVI—Newspapers 78
CHAPTER XVII—Chicago's Charities 86
CHAPTER XVIII—Chicago's Railroad Systems 89
CHAPTER XIX—Banks of Chicago 116
CHAPTER XX—Board of Trade 141
CHAPTER XXI—Chicago Cattle Market of the World 150
CHAPTER XXII—Manufacturing Interests 161
CHAPTER XXIII—Chicago's Business Interests 181
CHAPTER XXIV—Prominent Men, Past and Present 233
Aldrich, Charles H 253
Allerton, Samuel W 266
American Trust and Savings Bank 130
Armour Institute 59
Armour, M. C 163, 164
Armour, Philip D 237
Armour & Co 152
Arnold, Bion J 214
Auditorium Hotel 230
Automatic Electric Company 174, 175
Bailey, Edward W 148
Ballou, A. P 134
Banks, Alexander F 109
Banning, Ephraim 250
Barrett, Thomas E 277
Bartlett, Charles L 275
Belt Railway Company of Chicago 105
Bensinger, Moses 189, 190
Bird, A. C 108
Blakely, C. F 192
Blakely Printing Company 192
Blome, Rudolph S 228
Bogle, W. S 204
Borders, M. W 261
Boyles, Charles D 146
Brown, Paul 258
Browning, Granville W 257
Brundage, Edward J 259

PAGE

Brunswick-Balke-Collender Company 190
Bush, William H 243
Bushnell, Henry D 178
Brock, A. J 194
Brock & Rankin 194
Byllesby, Henry M 217
Cable, The Company 175, 176
Cameron, Dwight F 114
Chicago Bridge & Iron Works 172
Chicago Edison Company 194-196
Chicago, Milwaukee & St. Paul Railway Company 96
Chicago National Bank 124-126
Chicago Telephone Company 200
Chicago Terminal Transfer Railroad Company 99-101
Chicago & Eastern Illinois Railroad 102-104
Chicago & Milwaukee Electric Railroad, The 114
Chicago & Northwestern Railway Company 93-95
Chicago & Western Indiana Railway 105
Clark, George M 189
Clark, George M., Company 189
Commercial National Bank 126
Commonwealth Electric Company 196-198
Cooley, Lyman E 216
Continental National Bank 123, 124
Corn Products Company 179
Cudahy, John 147
Cummings, John J 171
Crilly, Daniel F 267, 268
Davis, Reginald J., Company 226
Delihant, W. T 208
Dickinson, Albert 144
Dickinson, Charles 145
Dickinson, Dr. Frances 264
Dickinson, Nathan 145
Dickinson, The Albert, Company 144
Dunne, Hon. Edward F 33
Emmerich, Charles 243
Ewen, John M 211
Faithorn, John N 101
Farwell, John V., Sr 246, 247
Federal Life Insurance Company 137
Ferguson, Dr. Alexander H 263
Fetzer, John C 109, 110
Field, Marshall, & Co 181-185
Fiero, Albert W 213
First National Bank 122
Fitzgerald, Richard 110
Forrest, W. S 256
Forsyth, Jacob 246
Fraser, David R 240
Greenebaum, Elias 133
Greenebaum, Henry E 133
Greenebaum, James E 133
Greenebaum, Moses E 133

PAGE

Greenebaum Sons 133
Gage Bros. & Co. 186
Gahan, Thomas 242
Goodrich, Adams A. 254
Gray, James J. 261
Great Northern Hotel 231
Gurley, W. W. 252
Hamilton, Isaac M. 137
Hammond, R. R. 206
Happel, Charles J. 277
Harris, N. W., & Co. 132
Head, Franklin H. 266
Heyworth, James O. 218
Hicks, F. M., Company 169, 170
Hogan, Thomas S. 258
Hopkins, Albert J. 255
Hotel Majestic 232
Hoyt, Howard H. 136
Hudson, T. J., Jr. 208
Hughitt, Marvin 95
Hunt, Robert W. 213
Hunt, Robert W., & Co. 212
Illinois Brick Company 221
Illinois Central Railroad 97
Illinois Trust and Savings Bank 127, 128
Illinois Tunnel Company 201
Inter Ocean, The 82
Iroquois Iron Company 163, 164
Irwin, Charles D. 147
Irwin, Green & Co. 146
Jackson, George W. 203
Jackson, W. J. 105
Jennings, J. Elliott 140
Jones, John S. 268
Kesner, Jacob L. 272
Kohler Bros. 218
Lake, William H. 149
La Salle County Carbon Coal Company 207
Lemmon, T. A. 267
Lenehan, Joseph H. 139, 140
Libby, McNeill & Libby 156
Lincoln, George E. 272
Loose, Jacob L. 267
Madden, Martin B. 221
Mansur, E. L., Company 188
Mather, Alonzo L. 110-112
Mayer, Oscar F. 273
MacArthur Bros. Company 209, 210, 211
MacArthur, Archibald 210
MacArthur, Arthur F. 211
McClean, S. A., Jr. 257
McCord, Alvin C. 170
McCormick, Cyrus H. 233
McDonald, James 205
McEwen, Willard M. 248
McGavin, Charles 262
McMunn, Samuel W. 168, 169
McMynn, John C. 214
Meacham, Florus D. 222
Meacham & Wright Company 222
Merchants' Loan and Trust Company 129, 130
Miller, Harry I. 104, 105
Miller, John S. 252
Miller, Walter H. 159
Mitchell, John J. 127, 128
Mitten, Thomas E. 112
Monarch Book Company 190
Morrill, Charles E. 273
Morris, Nelson & Co. 155
National Life Insurance Company of the U. S. of America. 138, 139
National Packing Company 157

PAGE

Netcher, Charles 245
Noel, Prof. Theophilus 274
Nollau, Arthur 226
Northern Trust Company 131
Northwestern Terra Cotta Company 223, 224
O'Donnell, M. C. 208
O'Gara, Thomas J. 204
Ogden Gas Company 199
O'Neill, Francis 278
Otis, Joseph E. 241
Palmer House 229
Palmer, Potter 235
Pam, Hugo 260
Peck, Philip F. W. 239
People's Gas Light and Coke Company 198
Peters, Homer H. 269
Plamondon, Charles A. 275
Porter, Washington 270
Pratt, Dr. Edwin H. 262
Pullman Palace Car Company 106-108
Rankin, Charles W. 194
Reinberg, Peter 193
Republic Iron and Steel Company 162
Rider, William H. 192
Roche, John A. 31
Roebling Construction Company 219
Russell, John B. 134
Sapp, Gordon G. 191
Scherzer, Albert H. 168
Scherzer Rolling Lift Bridge Company 164-167
Scherzer, William 167
Schlueter, Henry W. 212
Schneider, E., & Co. 175
Schwarzschild & Sulzberger 157
Selz, Morris 185
Shankland, E. C. & R. M. 210
Shope, Simeon P. 250
Shortall, John G. 271
Simon, Robert M. 276
Smith, Abner 240
Smith, Frederick A. 247
Smulski, John F. 259, 260
Spaulding & Co. 187
Spry, Samuel A. 225
Spry, The John, Lumber Company 225
Standard Washed Coal Company 208
Starnes, P. M. 139
Starring, Mason B. 113
Steger, John V. 178
Steger, The Piano Company 176-178
Stromberg, Albert 172-174
Stubbs, John C. 108
Sturgeon, Robert C. 135
Sulzberger, Ferdinand 158
Swift, George B. 32
Swift, Gustavus F. 238
Swift & Co. 153
Sweet, Col. A. L. 220
Thomas, E. A. 220
Thomas Elevator Company 220
Thornton, Charles S. 254
United States Peat Fuel Company 178
Vehmeyer, Henry F. 146
Walker, Lincoln W. 191
Weber, B. F. 227
Wells, Addison E. 200
Wells, Fred A. 200
Wells Bros. Company 200
Wickes, Thomas H. 242
Willey, Cameron I. 224
Wright, Frank S. 223

UNIVERSITY OF ILLINOIS-URBANA
3 0112 065689157